

CASIC Survey Management Challenges

Co-Chairs: Karen Davis, RTI and Jane Shepherd, Westat

This panel provides a venue for presenting and discussing the management and administrative challenges in today's CAI environment.

The session is divided into two topic areas and within each of these topics, the panelists and a moderator address current issues, approaches taken, and lessons learned.

The approach is to discuss the techniques used in different organizations to address key management issues, participate in a discussion of these issues, and have an opportunity to ask the panelists about effective approaches to common situations

CASIC Survey Management Challenges

Co-Chairs: Karen Davis and Jane Shepherd

- **Today's Panel**
Management Challenges Related to
Applying and Integrating New Technologies
- **Tuesday's Panel – Management Challenges
Related to Talent Development, Retention, and
Training**

Management challenges related to Applying and Integrating New Technologies

This panel will discuss current challenges for survey organizations and project managers related to applying and integrating technologies needed in today's CASIC studies.

These new technologies are associated with big data, BYOD, sensors and wearables, and other new devices. What are the pros and cons to using leading edge technologies for data collection?

How can survey organizations apply and integrate these technologies and plan for the constant need for utilizing the latest technologies to enhance data collection efforts?

Management challenges related to Applying and Integrating New Technologies

Topics include:

- With the recent advances in technology, including mobile devices, personal devices and sensors, how do survey projects plan to utilize and integrate these new technologies successfully?
- How are organizations minimizing risks associated with using brand new leading edge technologies so that data is high quality, reliable, and available on schedule?
- Compare and contrast the benefits and risks of using leading edge technologies for data collection projects.

Management challenges related to Applying and Integrating New Technologies

Moderator: Jane Shepherd, Vice President, Westat

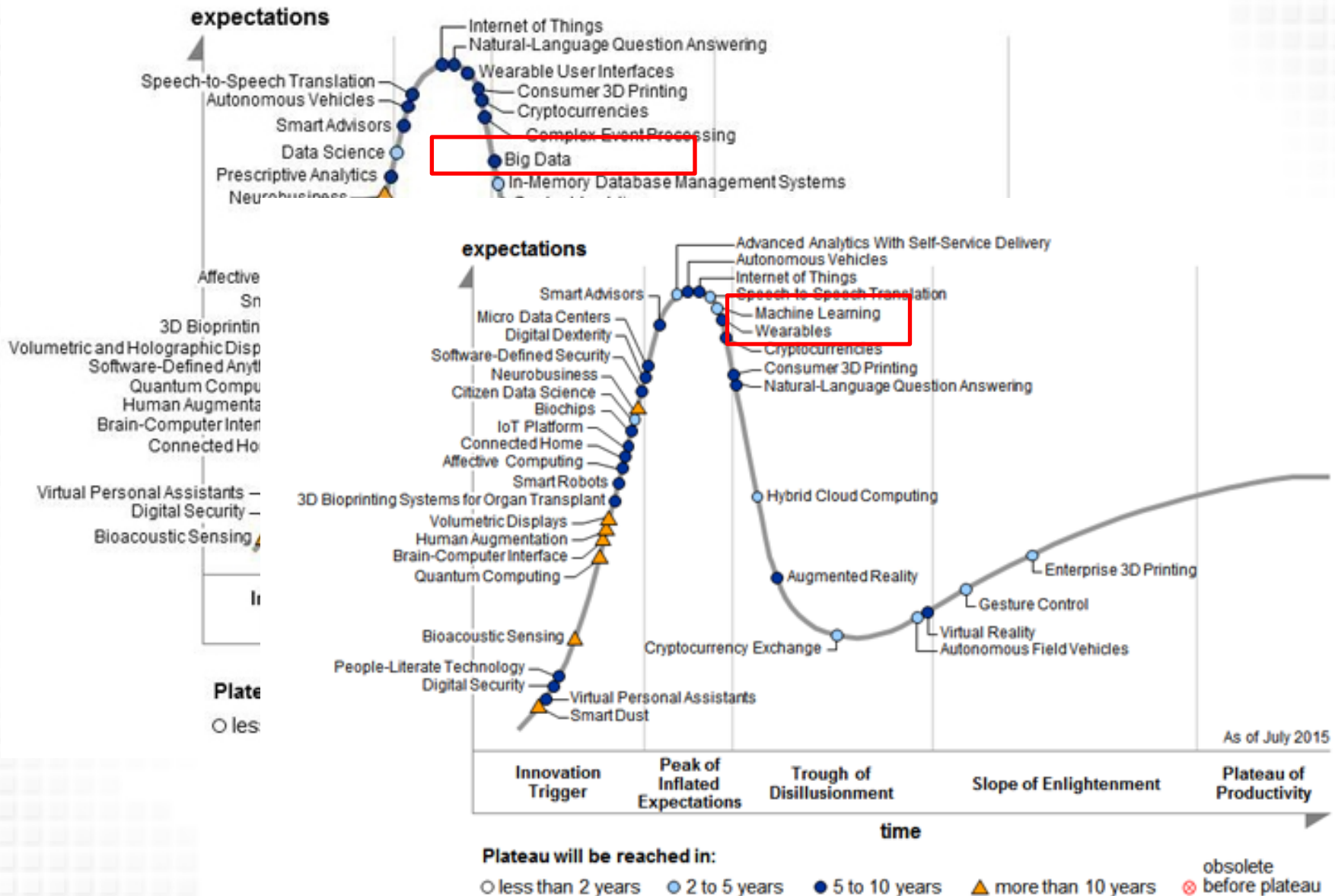
Panelists:

- Gina Cheung – Chief Technology Officer, Survey Research Operations, Survey Research Center, University of Michigan
- Preeta Chickermane, IT Director, NORC
- Jason Fields, Survey Director, U.S. Census Bureau
- Rick Kryger, Director of Survey Processing, Office of Technology and Survey Processing, BLS
- Gene Shkolnikov, Associate Director, Technology Solutions, Mathematica Policy Research

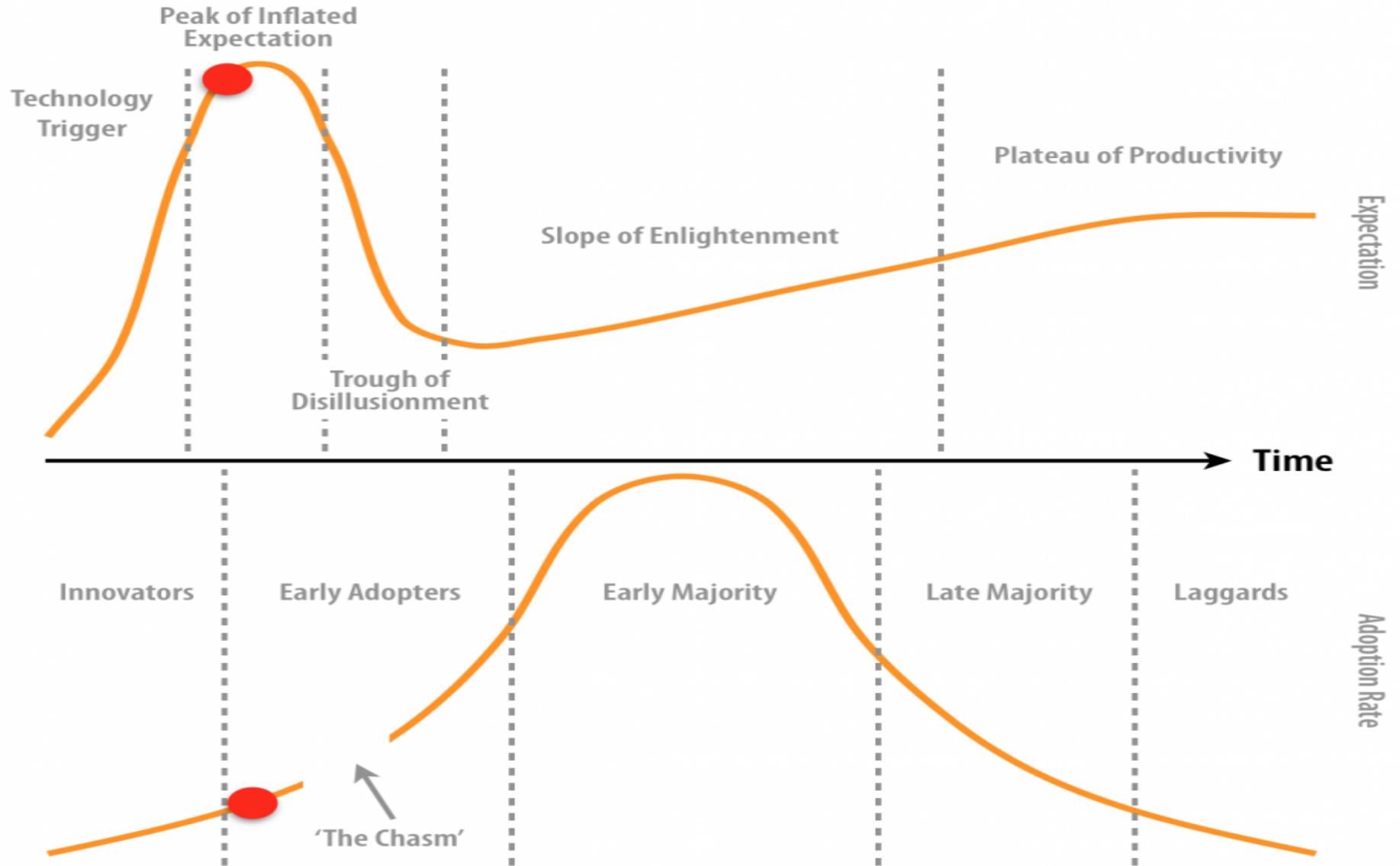


Abstract: This panel will discuss current challenges for survey organizations and project managers related to applying and integrating technologies needed in today's CASIC studies. These new technologies are associated with big data, BYOD, sensors and wearables, and other new devices. What are the pros and cons to using leading edge technologies for data collection?: How can survey organizations apply and integrate these technologies and plan for the constant need for utilizing the latest technologies to enhance data collection efforts?

Gina Cheung
Survey Research Center,
May 4th, 2016



Gartner Hype Cycle



Technology Adoption Curve

“How to do that”

- **CASIC Studies are collecting info:**
 - Who?
 - What?
 - When?
 - Where?
- **To answer Why?**
- **And new technologies are the tools for**
“How?”

Questions for us (IT leaders)

- Who are users for our existing IT systems, and what are they doing?
- How efficient are our current operations?
- Are there any bottlenecks which cause problems?
- Are staff getting stuck on tasks?
- Are we duplicating effort between different departments?
- Are there ways of working faster or tasks that could be automated?
- Is our current technology going out of date or causing compatibility issues?
- Are our business needs or processes likely to change in the near future?

Challenges to move on...

- Funds for the innovation
- Operation vs. development
- **Early Adopters (resources in the operation environment)**
- Expendable for more projects to use
- What is the next new thing we need to do

Certified Professional Innovator

- The program is designed to introduce the practices to stimulate and manage innovation in an organization.
 - People = Individuals in the organization, including leaders
 - Practices = Culture, competency, and key processes of the organization
 - Purposes=Outcomes, or the value the organization intends to create
- The key to making (any kind of) innovation happen
 - Align and integrate different kinds of leadership, culture and competencies, as well as situational elements
 - Use the tension between competing forces – like the simultaneous pursuit of standardization and customization to create positive movement

THANK
YOU!



NORC

Applying And Integrating New Technologies

Preeta Chickermane

Director, IT

Project Planning For New Technologies

- Demos
- Understanding benefits
- PoCs
- Pre-test
- Training
- Successful production data collection

Minimizing Risks

- 'Best of breed' approach
- PoCs
- Cost sharing
- Experiments
- End-to-end testing
- Fail-safe mechanisms

Benefits And Risks

Benefits

- Facilitates richer data
- Increases convenience
- Reduces costs

Risks

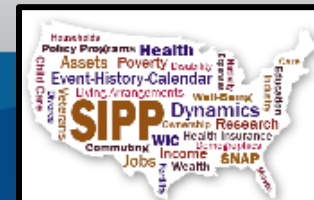
- Rare technical problems that may lead to loss of respondent cooperation, data, time etc.

Some SIPP Innovations and Technological Integration with Respect to Field Data Collection

Jason Fields
U.S. Census Bureau¹

May 3-4, 2016
FedCASIC
U.S. Census Bureau

¹ This work is released to inform interested parties of ongoing research and to encourage discussion of work in progress. Any views or opinions expressed in the paper are the authors' own and do not necessarily reflect the views or opinions of the U.S. Census Bureau.



SIPP Event History Calendar

F3-Check Progress F10-Exit EHC

Talking To: John Doe About: John Doe

Topic	REFERENCE YEAR 2015												INTERVIEW YEAR 2016					
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Residency	[Red bar]																	
Marital History	[Red bar]																	
Education	[Black bar]																	
XYZ Corp.	[Red bar]																	
ABC Ltd.	[Red bar]																	
Job 3	[Black bar]																	
Job 4	[Black bar]																	
Job 5	[Black bar]																	
Job 6	[Black bar]																	
Job 7	[Black bar]																	
More Jobs (if any)	[Black bar]																	
No Job	[Red bar]																	
SSI	[Red bar]																	
Food Stamps	[Black bar]																	
TANF	[Black bar]																	
Gen. Assist.	[Black bar]																	
WIC	[Black bar]																	
Private 1	[Red bar]																	
Private 2	[Red bar]																	
Medicare	[Black bar]																	
Medical Assista...	[Black bar]																	
Military	[Black bar]																	
Other Coverage	[Black bar]																	

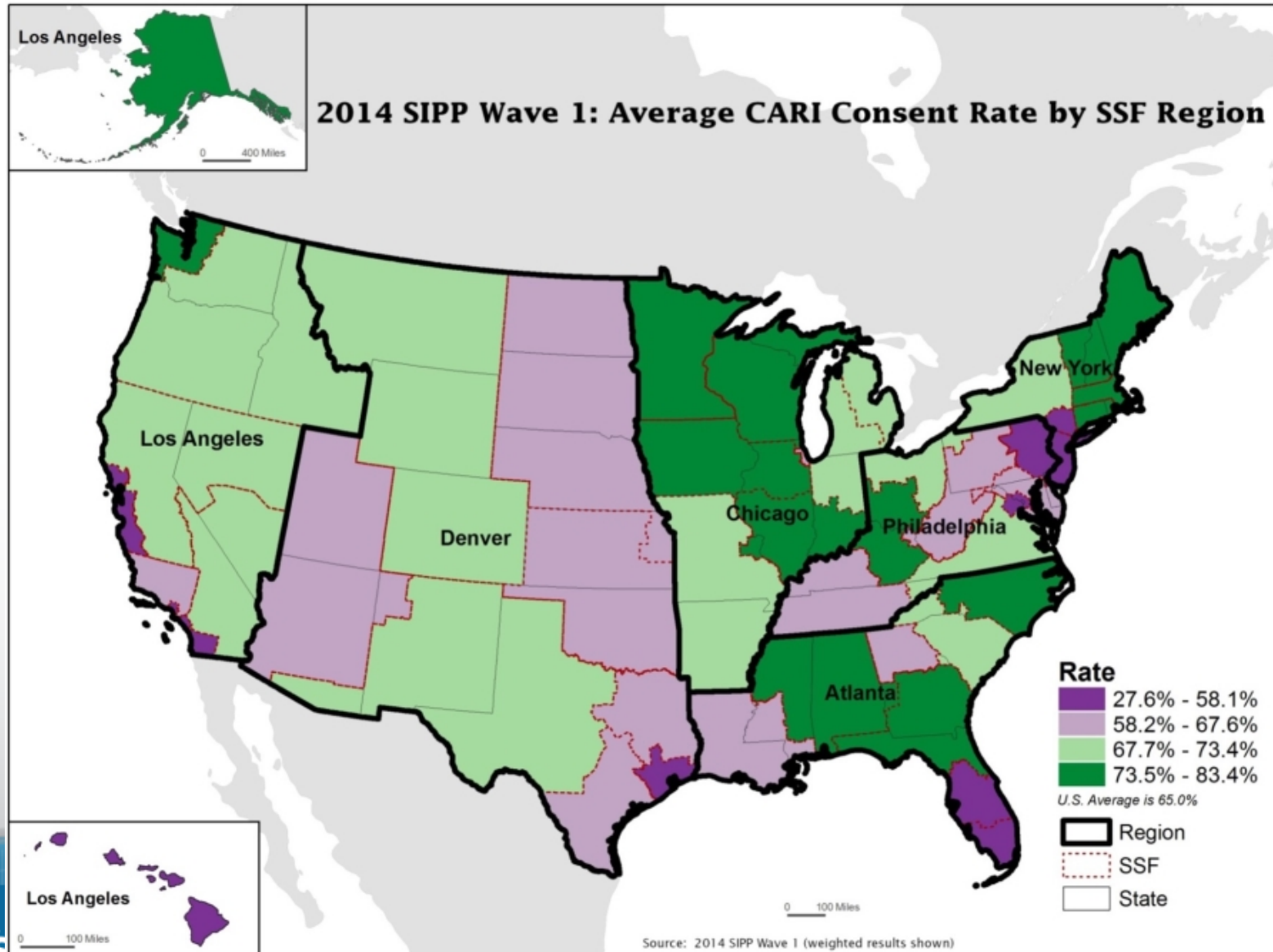


Model-Based and Centralized Incentives

- Develop management procedures for centralizing the decisions and administration of discretionary incentives
- Assign incentives to households with the lowest likelihood of responding without an incentive and highest likely increase in response if given an incentive
- Logistic regression model that predicts the probability of response using household characteristics such as:
 - Metropolitan status
 - Sex
 - Tenure
 - Age
 - Household size
 - Poverty strata



Computer Assisted Recorded Interviewing



Paradata/Auxiliary Sources

The Interviewer

- Certification test for interviewer training
- Interviewer characteristics
 - Census experience
 - Prior SIPP experience
 - Supervisory status
 - Demographics
- Interviewer debriefing
- Interview recordings



Integrating New Technologies

Management Challenges

Rick Kryger

Director of Survey Processing

Office of Technology and Survey Processing

FedCASIC 2016

May 4, 2016

Directorate of Survey Processing

Overview:

- ④ Operation and maintenance of survey and administrative IT application systems
- ④ Design and development of survey and administrative application systems
- ④ Manage 12 separate Federal IT investments
- ④ 319 Federal staff
- ④ 120 On-site Contractor staff

Management Challenges

- People
- Budget
- Complexity
- Time
- Technology



Management Challenges

People:

- ④ Training staff
- ④ Hiring new staff
- ④ Retaining staff

Management Challenges

Budget:

- ④ Constant budget uncertainty – CR's that last 3-6 months with another 2 months before final budget availability is known
- ④ Multiple FY's of absorbing inflationary costs for operations and maintenance
- ④ Unplanned FY costs assessed by the parent agency
- ④ Frequent gloom and doom scenarios for future FY's

Management Challenges

Complexity:

- ④ Reduced complexity and improved capability for the user frequently means increased complexity for IT operations and maintenance

Management Challenges

Time:

- ④ Each year a larger percentage of available staff time is consumed by operations and maintenance
- ④ Less and less time available for research and modernization

Management Challenges

Technology:

- ④ Constant cycle of upgrades to maintain vendor support for commercial hardware/software
- ④ Technology obsolescence and replacement
- ④ HTML5 and varying level of browser compatibility

Management Challenges

Strategies for overcoming obstacles:

- ④ Be flexible, don't succumb to the historical inefficiencies that may exist in your agency
- ④ Be thoughtful, know your agency's business processes and know where you can provide the most value at the broadest level
- ④ Be opportunistic, find opportunities to design and apply a single solution for multiple uses
- ④ Have foresight, it's easy to get caught up in the here and now, take actions to get you to where you need to be in the future

Contact Information

Rick Kryger

Director of Survey Processing
Office of Technology and Survey
Processing

kryger.rick@bls.gov



Management Challenges

Applying and integrating new technologies

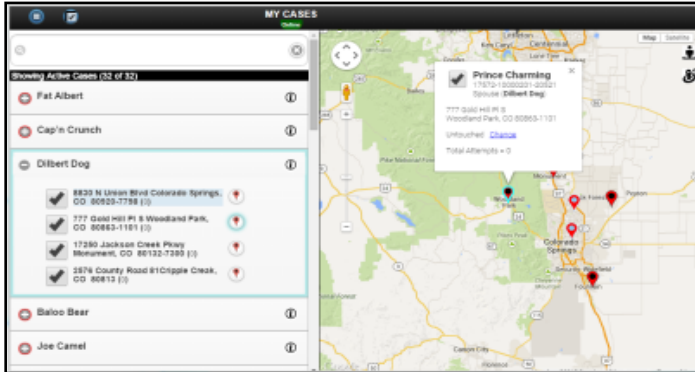
May 2016

Gene Shkolnikov
Associate Director, Technology Solutions Group

Example: Mobile

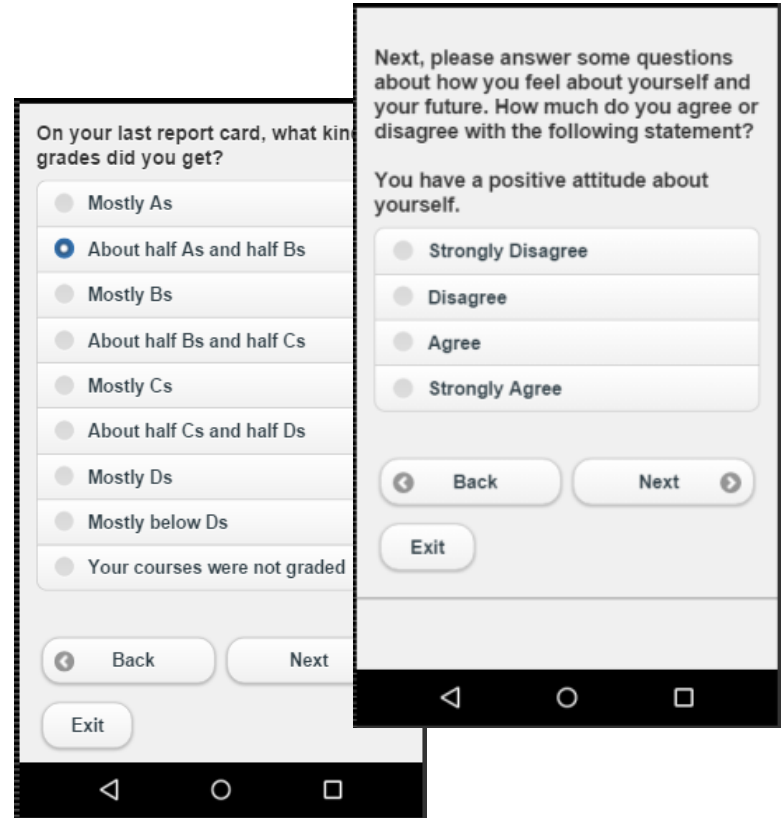
Field location and case management

Surveys designed for mobile



Mobile First

Electronic Signatures



Focus on User Experience (UX) & Data visualization

Demo Grantee - 12345678 (Healthy Marriage) Hello, testuser105@npr.com [Log off](#)

FORM
Learn More, Family Outcomes, Reporting, and Management

[Clients](#)
[Workshops](#)
[Service Providers](#)
[Reports](#)
[Settings](#)
[Help](#)

Charlie Brown (Client ID 40001033)

[Profile](#) [Service History](#) [Workshops / Sessions](#)

Program Information [Edit](#)

Enrollment Date: 9/20/2015
Service: Enhanced Services
Assignment: Active
Client Status: Active
Status Change Date: 9/20/2015

Client Information [Edit](#)

Application Date: 9/20/2015
Population: Youth
Grantee Location: Northside
Date of Birth: 10/30/1973
⚠️ Applicant was not screened at enrollment for intimate partner violence.

Contact Information

230 Main St
Anytown NJ 08008
(508) 555-1032

Additional Contacts
❌ No additional contact(s) have been added.

Assigned Case Manager(s) [Edit](#)

Marybeth Case Manager, Mathew Case Manager, Mathew Site Administrator

Client Surveys

Type	Status	Date Completed	Action
Applicant Characteristics Survey	Complete	11/05/2015	Review
Entrance Survey	Complete	02/16/2016	File
Exit Survey	Incomplete	--	File

Service Summary

Type	# Provided	Most Recent
Service Contacts	2	11/10/2015
Referrals ▲ Follow up needed	3	11/10/2015
Incentives	0	--

Workshop Summary

Name	# Session(s) Attended	Last Session Attended	Next Meeting Date
Healthy Marriage Workshop 1	5	11/05/2015	--

GRANTEE NAME

2016 GRANT YEAR | **20 MORE ENROLLEES LAST WEEK!** | This dashboard highlights key grantee indicators for the current grant year. Click on specific tabs to explore additional aspects of grantee and client performance.

ENROLLMENT

All Grant Years to Date: **100** Cumulative Enrollment
Current Grant Year to Date: **85%** Percent of Target Enrolled

Enrollment by Month

100 Enrollment Target | 85 Actual Enrollment % to Date

CLIENT PARTICIPATION

Current Grant Year to Date: **75%** Percent of Clients Who Participated in Service Within Two Weeks of Enrollment

Client Participation During The Month

CLIENT OUTCOMES

Entrance Survey Completion Within One Month of Enrollment: **85%** (15% Completed within one month, 85% Not completed within one month)

Completed Entrance Surveys (Current Grant Year to Date): **340**

Exit Survey Completion Within Six Months of Entrance Survey: **75%** (25% Completed within six months, 75% Not completed within six months)

Completed Exit Surveys (Current Grant Year to Date): **450**

- Build **secure, user friendly** and **accessible** application to encourage user engagement while protecting sensitive information

- Encourage data exploration and drive better decision-making. Use data visualization tools to: See the whole story, Drill down for more detail, **Analyze, reveal, collaborate and act.**

Emerging technology thought leadership

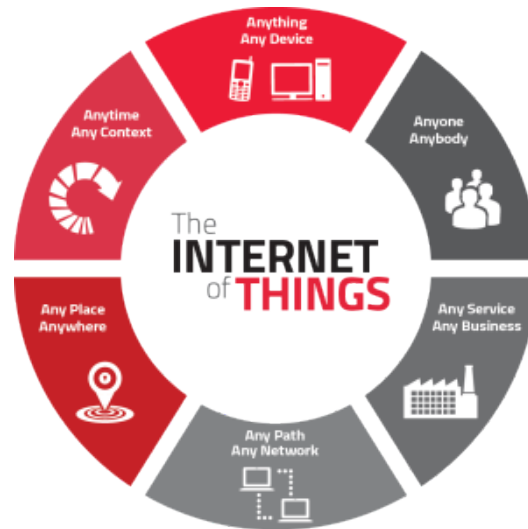
Home



Smart Bots



Wearable Tech



Transportation





Discussion