

# 2020 Census Program Management Review

**WBS 1.104 - Acquisition and Sourcing Management**  
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# WBS 1.104 - Acquisition and Sourcing Management

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## Accomplishments:

- Established in June 2010
- Reps from ACQ, IT, TMO, ORMPE and Decennial Divisions involved with contracting
- Developed acquisition best practices, principles, and guidelines, strategies, procedures and templates
- Have worked with Census portfolio management group (ORMPE) and DOC to ensure compliance with Census and Commerce acquisition policies. As well as regular interaction with ACQ and IT.
- Have collaborated with other Federal agencies on a variety of technical exchanges:
  - State Department
  - NOAA
  - NASA
  - CNTPO (Center for Narco-Terrorist Program Office)
  - NSA



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## Accomplishments:

### Market Research:

- Have focused on a wide reaching, robust and innovative market research approach to identify potential 2020 capabilities
  - Identify capabilities to explore during R&T, 2020 development cycle or even 2030 early planning
  - Inform requirement development and 2020 Census design
- Collaborated with Rapid Reaction Technology Office (RRTO) of OSD
  - 2 step process, Needs Workshop and Solutions Workshop
  - Needs Statement resulted in 153 companies responding
- Developed and articulated business challenge “talking points” for the Needs Workshop which help “standardize” our 2020 challenges.
- Needs Statement (as an RFI) helps inform industry of capabilities Census is looking for.



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**Needs Statement** - Census was looking for companies with emerging products in the following areas:

## Data / Data Management

- Cost and data modeling and simulation tools
- Data visualization
- High performance and on-demand computing
- Mining, validation and aggregation tools
- Multi-mode data collection
- Para-data analysis and management
- Predictive analytics
- Processing and storage infrastructure
- Record linking and matching
- Trend analysis

## Mobile Infrastructure and Strategy

- Address capture and correlation to GPS
- Application development approaches
- Asset management tools
- Bring Your Own Device (BYOD) management
- Disadvantaged and disconnected communications
- Internal messaging and communications
- Management and infrastructure
- Tools to protect data at rest and in motion
- Virtual office tools

## Workforce Management

- Employee screening tools
- Route planning and tracking
- Virtual training
- Virtual workforce tools
- Workflow management
- Workforce recruiting

## Communications

- Dynamic/virtual call centers
- Interactive Voice Response technology
- Multi-language internet applications

## Geospatial

- Demographics tools
- Geo-tagging and aggregation
- Imagery exploitation
- Spatial databases

## Social Networking

- Communications
- Crowdsourcing
- Marketing tools and trend analysis
- Multi-lingual tools for Natural Language Processing and translation
- Participation stimulus methods including incentives and “gamification”
- Thought leader identification



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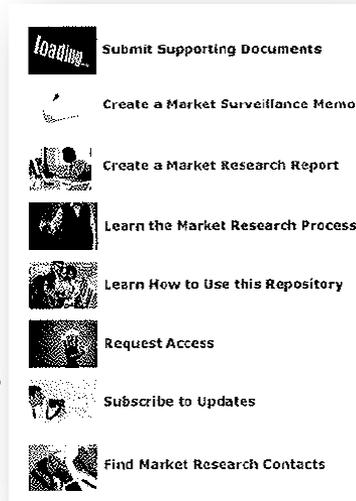
- One-on-one market research meetings (February 2013) conducted with 15 larger companies. Potentially more to follow in coming months.
- 18-20 companies are being scheduled to provide product demonstrations in Center for Applied Technology (CAT) lab during March and April 2013.
- All vendor information gathered from the workshops and the individual meetings is captured in the **SharePoint Market Research Repository**
  - Newly developed and deployed by the 2020 Census Acquisition and Sourcing Team
- Market Research Repository maintains company information
  - Sortable by capabilities or events (among a variety of other options)
- Organized a Corporate Market Research effort
  - Goal is to build **enterprise level coordination** of engagement with industry, and
  - Create a more optimal environment to **realize acquisition cost efficiencies** across enterprise



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## Acquisition and Sourcing's Sharepoint Market Research Repository

- Where to find the repository
- Front Page walk through
- **Contribute**
  - Add company, event, memo, report, supporting documentation
- **Explore**
  - Search companies, events, capabilities, memos, reports, and/or documents
- **Connect**
  - Request access
  - Subscribe to updates



## [Market Research Repository](#)



CLICK HERE



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## Near Term Focus:

- Schedule 18-20 follow-up meetings (some with CAT demos) with vendors
- Participation in the Corporate Market Research Team
- Facilitate the utilization of the 2020 Market Research Repository across the enterprise
- 2020 brainstorming activity to identify topics/new ideas coming out of the recent Market Research efforts
  - What may be able to be incorporated in the R&T agenda
  - Potential use in 2020 development, and/or
  - Become part of the 2030 early planning



# Engagement Mechanics

Concepts learned from one of the companies during our Market Research efforts:



- Every day, in the online game *FarmVille*, thousands of people virtually...
  - Plow land,
  - Plant, grow, and harvest crops,
  - Raise livestock, and
  - Visit neighbors.

**All this for the reward of “farm coins” and experience points** (*And both private industry and the public sector have taken notice*).

# Engagement Mechanics (Cont.)

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**Engagement Mechanics:** a suite of products including...

- Gamification.
- Reputation.
- Social solutions.

## Game Mechanics (Gamification)

Behavior-influencing techniques from the gaming industry, used in non-gaming environments. These techniques drive behavior through competitive experiences, where users compete and employees compete to be the most productive member of the team.

## Reputation Mechanics

Drive user behavior through status within a community. Implementations with these mechanics enables everyone in the community to choose specializations and earn status in distinct topics, helping experts and advocates establish status within the community. Unlike Game Mechanics, Reputation Mechanics focus on allowing everyone in the community to "win".

## Social Mechanics

The modern user experience design requires real-time, contextual experiences based on what users are doing across company sites and apps right now. From real-time notifications to contextual activity streams, social mechanics make the user experience as engaging as many popular social networks.



# Engagement Mechanics (Cont.)

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## Game Mechanics

- **Points** -- Assign points for specific high value behaviors and achievements.
- **Achievements** -- Provide positive reinforcement for high-value user behaviors. Companies can tie these achievements to virtual or tangible goods, or to boost a user's status and reputation.
- **Levels** -- Signify levels of engagement across a company's structure. Tie them to a user's profile and status, while also serving up unique rewards for users at that level.
- **Missions** -- Create a set of behaviors for users to perform in order to unlock specific rewards or achievements. Configure missions to be completed after a specific progression of behaviors, or in random order.
- **Contests** -- Create a set of missions, and reward those who finish most quickly or effectively with early access to products, discounts, and other privileges.
- **Leaderboards** -- Champion the most engaged users and groups, and show people where they stand as relative to their peers. Assign leaderboards for different areas of expertise.
- **Notifications** -- Encourage engagement with real-time notifications when users perform a desired behavior, level up, or unlock a reward.
- **Anti-Gaming Mechanics** -- Set limits on the number of times a behavior can be rewarded to a user, either across a whole network or within a specific section or module. Set restrictions on the time frame in which they can be rewarded, and cool down rates for how long they must wait to be rewarded again.



# Engagement Mechanics (Cont.)

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## Reputation Mechanics

- **Levels** -- Create levels of status and reputation, tied to both the quality and quantity of high-value behaviors and activities.
- **Tracks** -- Create groups of missions that represent an area of expertise. As users complete tracks, they increase their rank and reputation in that specific skillset.
- **Community Expert** -- Create a task-list of tracks to reach a new rank of status or reputation.
- **Leaderboards** -- Champion community experts, and display what high-value behaviors can boost their peers to the top. Link leaderboards to specific areas of expertise.
- **Secondary Units** -- Create points specifically tied to rank and reputation, and separate them from points tied to virtual rewards or goods.



# Engagement Mechanics (Cont.)

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## Social Mechanics

- The latest breed of social networks help connect people around topics (and brands), not necessarily existing friendships and relationships. Company sites can be their own contextual social network.
- Companies can add real-time notifications, activity streams, alerts, and following to your website.
- Social context keeps users on websites for longer, helps guide users to relevant content, and encourages repeat visits.



# Engagement Mechanics (Cont.)

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## What does it mean for training staff?

- Staff could participate in learning programs by going online (e.g. Census portal), via a webinar, or using their mobile devices, tracking their progress compared to the progress of others.
- Staff would feel a sense of accomplishment by completing training programs, and along the way, receive badges and rewards for their accomplishments.
- Staff could be encouraged to practice what they learned in training, by applying real-world scenarios and techniques.
- Social networks could be established between staff, encouraging support, interaction, and engagement.
- Badges could be awarded for...
  - **Completing training exams with the fewest amount of errors or mistakes made,**
  - **Successfully completing all training modules and requirements, and**
  - **Completing all required paperwork (e.g. ahead of time, on time).**



# Engagement Mechanics (Cont.)

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## Cautions

- Need to be careful not to encourage unintended behavior (e.g. falsification, rushed and incomplete work, careless mistakes) for the sake of receiving a badge or reward.
- Don't want to discourage people from participating because they feel it's hopeless or not worth contributing (e.g. excessive competition).
- Need to research how much or how few of these techniques we would want to incorporate into our training and related products.
- Need to carefully research all aspects of gamification first, before implementation.

