

## RADAR May in-person meeting

May 18, 2016

### Attendees:

Mike Leonardson	Trevor Stewart
Erica Nelson	Alex Kogan
Dave Dauksas	Dorothy McQuilken
Thomas Mackenzie	Eric Cohen
Reid Simon	Amy Pawlicki
Katie Greehan	Jason Guthrie
Brian Miller	Nicole Deschamps
Brian Wolohan	Greg Shields
Miklos Vasarhelyi	Brian Collins
Al Anderson	Evan DeFord
Won No	Elisabeth Scherr
Qi Liu	Jun Dai
Chandra Thomas	
<b><i>Via Teleconference:</i></b>	
Jul-ann Gorgi	
Kelly Hnatt	
Kristine Hasenstab	

### Meeting Notes:

- The Chair opened the meeting with introductions and a recap of action items. The purpose of the meeting was to discuss the status of each of the proposed projects, and discuss any questions or issues brought up by the research teams.
- The Board approved the April conference call meeting minutes for posting to the RADAR website.
- The research teams presented updates on each of the proposed projects:
  - **Audit Analytics Sandbox:** This project is examining five trials, with the expectation that it will be narrowed down to only a few trials. Below are the proposed trials:
    - **Formalized Evaluation of Control Risk Assessment:** This trial intends to provide an expert system to improve audit efficiency and effectiveness utilizing Verbal Protocol Analysis (VPA) to elicit knowledge from auditors, with the goal of capturing insights in the decision making process.
      - **Overall group comments:**
        - *In the design of the research it was noted that in “stage 1” would consist of splitting up two groups of auditors and assigning them to a public or non-public company. It was*

*suggested that the research team consider focusing on reliance vs. non reliance or Inherent Risk vs. Control Risk rather than public vs. non-public.*

- **Internal Control Compliance Framework:** *This trial would propose a framework for internal control compliance, covering four components:*
  - **Workflow Modeling**
  - **Active Enforcement**
  - **Workflow Auditing**
  - **Audit Analytics**
    - **Overall group comments:**
      - *Regarding the audit analytics component, this should focus on analytics that are more relevant to controls.*
- **Semi-automatic Evaluation of Control Effectiveness: An Audit App Approach:** *This trial intends to create a suggestion model that helps users identify and select the most appropriate control testing app(s) based on relevancy..*
- **Apply Process Mining to Evaluate Internal Control Effectiveness Automatically:** *This trial aims as applying process mining to evaluate internal control effectiveness automatically.*
  - **Overall group comment:**
    - *We need to also show how this can be audit evidence.*
    - *It would also be helpful to compare this new approach to the traditional audit approach to see what the benefits are.*
- **Application Volatility:** *This trial aims to: (1) prove that the logic of six sigma with volatility function is valid for continuous assessment about the effectiveness of internal control, (2) demonstrate the map (explicit construction stage) of this design, (3) demonstrate the framework of Six Sigma Continuous Control Management (SSCCM), (4) set up ICS (Internal Control System) Automation With Volatility Function.*
- **Multidimensional Audit Data Selection (MADS):**<sup>1</sup> *This project will propose an outlier prioritization methodology to identify a sample that is more likely to be problematic in performing substantive tests of details. The group discussed the revised framework.*
  - **Overall group comments:**
    - *The framework should not add additional work to what is already being done.*
    - *The “optional” procedure included within the framework should not be a procedure that is performed by the audit team. The filters that are being applied should be tested and validated by the research teams.*
- **Visualization:** *This project proposes a framework that will guide auditors in incorporating and selecting visualization techniques in the audit process. As a first step, the researchers have performed a literature review to understand what research has been done on visualization. The following types of literature were reviewed:*
  - *Current research on data visualization*

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<sup>1</sup> This was previously referred to as the “Multidimensional Exceptional Exceptions” project.

- Theoretical frameworks and how to design and evaluate visualization
- Emerging Information visualization techniques
  - **Overall group comments:**
    - *There is a behavioral aspect to this research regarding how auditors respond to different visualization techniques.*
    - *We need to be able to show how this translates to audit evidence.*
    - *The piece of this research that may be most beneficial is the difference between exploratory vs. explanatory visualization*
- **Survey:** The survey is meant to gain a better understanding of the needs of firms in relation to internal control evaluation, exceptional exceptions, and visualization.
  - **Overall group comments:**
    - Given the relatively advanced stage of some of these projects, the group discussed whether a survey could be completed in time to inform these projects. The group discussed whether a more appropriate path might be to assign a Board rep to each project team, so that they can work directly with the researchers and answer any questions that they may have. *It may be more beneficial to assign a Board rep to each project team, so that they can work directly with the researchers and answer any questions that they may have.*
- The meeting with the broader group concluded, and the executive session began.

### Next Steps

1. AICPA staff to publish April minutes to website by Monday, April 23<sup>rd</sup>
2. AICPA staff to circulate May meeting minutes for review