# CREATING A CLEAR 20/20 ERM VISION TO TAKE ON TOMORROW'S RISKS







# How Technology Helps the Federal Government Improve Risk Transparency and Risk Response

Breakout Session C-2 September 10<sup>th</sup> 3:30pm



# Agenda

- Introductions
- Program Presentations
- Discussion and Questions





# Welcome!

- Ms. Alice Miller, DFC, Chief Risk Officer (CRO)
- Ms. Alyssa Smiley, DHS, Acting Director Risk Management and Assurance (RM&A) Division
- Ms. Atisha Burks, Navy, Senior Accounting and Finance Leader
- Ms. Alyssa Fusisi, Kearney & Company, Principal





# Introductions

**Breakout Session C-2** 



# Ms. Alice Miller, DFC



Enterprise Risk Management

Alice McNutt Miller is the U.S. International Development Finance Corporation's first Chief Risk Officer. She is responsible for developing, implementing, and managing a comprehensive process for identifying, monitoring and managing risks to DFC. Prior to joining DFC, Alice was the Millennium Challenge Corporation's first Chief Risk Officer. As CRO, she was responsible for guiding and overseeing the agency's approach to assessing and managing risk, including developing and implementing its Enterprise Risk Management (ERM) program. She also oversaw MCC's internal controls assessments and audit compliance activities. Prior to joining MCC, Alice was the Chief Financial Officer for Financing for Development Corp. (F4D), a U.S. 501(c)3 nonprofit organization that promotes innovations in financing as a means of increasing efficiency in development investments, and was the Director of Risk and Finance for F4D's wholly-owned subsidiary, Pledge Guarantee for Health, LLC.

Alice was also Chief Risk Officer for the U.S. Agency for International Development's Development Credit Authority (DCA), where she was responsible for credit policy and risk assessment of DCA transactions. Previously, she was a Senior Financial Officer in the World Bank's Office of Multilateral Trusteeship and Innovative Finance, and held multiple positions (including Deputy Chief Financial Officer and Vice President of Asset Management) at the Export-Import Bank of the United States. Alice also worked as a Program Examiner for the Office of Management and Budget, and was an international economist for the U.S. Department of Commerce. She has an MA in International Economics and International Relations 6 from the Johns Hopkins University School of Advanced International Studies and a



# Ms. Alyssa Smiley, DHS





Alyssa Smiley is the Acting Director for the Risk Management and Assurance division at the Department of Homeland Security. Since joining DHS Headquarters in 2016, Alyssa has assisted in developing a robust, risk based information technology assurance program that continues to be used by the Department to strengthen its IT security controls and is working to expand to provide enhanced coverage over application controls, data management, and information produced by the entity. Prior to joining DHS Headquarters, Alyssa supported Immigration and Customs Enforcement (ICE) within DHS.



# Ms. Atisha Burks, Navy



Atisha Burks is the Senior Accounting and Finance Leader at the Department of the Navy where she supports Navy Financial Management and Financial Improvement programs department wide. Previously she was the Chief of Financial Policy, Reporting and Property at the Department of Homeland Security United States Coast Guard. Prior to that she was the Director of Financial Reporting and Policy at the United States Department of Commerce.





# Ms. Alyssa Fusisi, Kearney

Alyssa Fusisi, Certified Public Accountant (CPA),

Certified Risk Management Professional - Federal

(CRMP-Fed), Certified Information Systems Auditor



(CISA), and Certified Government Financial Manager (CGFM), is a Principal with Kearney & Company. Ms. Fusisi has more than fourteen years of experience supporting multiple Federal agencies with financial management, internal controls, and management. Ms. Fusisi is the Customer Enablement Lead for Kearney's Emerging Technology Practice and serves as a member of the Association for Federal Enterprise Risk Management's (AFERM) Knowledge Capital Committee.







# **Polling Question**

## Polling Question #1

- Has using these emerging technologies improved the outcomes of your risk management program? (Multiple Choice)
  - a) Yes
  - b) No
  - c) Maybe
  - d) I don't know





# **Small Agency Perspective**

- Have a clear understanding of how you can use technology to drive results, rather than having technology drive you to distraction
  - Example: use of polling technology to identify enterprise-level risks, and to facilitate risk assessment and risk prioritization processes
- Spreadsheets can be the right answer, until they are not
- Understanding what data you need to pull together from disparate systems can help to identify appropriate technology solutions
- Taking the time to prepare, and to begin to "embed" ERM into agency operations will support required budget requests





# **Polling Question**

# Polling Question #2

- What level of integration has your agency achieved in respect to prioritizing and responding to entity-level risks? (Multiple Choice)
  - a) Full integration
  - b) Partial integration
  - c) No integration has been achieved yet





### **Current State**

- For the past several years, DHS has been working to increase the accuracy, completeness, reliability and standardization of data
- Enhanced dashboarding and risk sampling approaches have regularly been utilized
- Use of additional emerging technologies, such as Robotics Process
  Automation (RPA), Machine Learning, Blockchain, etc. remain a priority
  for DHS going forward to reduce burden, best utilize limited resources,
  and identify and react to risk timely.





# Data Analytics / Robotics Process Automation - Example: Charge Cards

- Due to the inherent risk associated with government charge cards, DHS has implemented a pilot program to utilize monthly data analytics. This allows the agency to evaluate a large population of data and update our risk criteria factors on a more real time basis.
- For example, when we have emergencies that raise the micro-purchase limit, data analytics allows us to evaluate any transaction over the MPL threshold and bump against the subset of card holders that had their limits increased. If we note a disconnect, that transaction flagged for a higher likelihood of being pulled for review.
- Since we have so many data attributes associated with cards, the possibilities
  for data matchups and trending analysis is vast and allows DHS to shift
  priorities for sampling and additional review to best align to our real time



# **Blockchain - Example: Import Tracking and Validation**

- A blockchain is an application that creates a unit of information a block that it connects together with other blocks – a chain. The blocks cannot be altered, hidden, or deleted, and are shared across every database that is involved in the chain.
- Supply chains are an old concept, the use of blockchain is simply looking to "automate", provide timely information sharing, and protect data and process.
- In theory, blockchain would cut down on dishonest suppliers and increase transparency in the supply chain by presenting importers with an unalterable history of their goods.
- For DHS specifically, use of blockchain would assist in reducing paperwork and time to process and inspect imports!





# **Blockchain - Example: Import Tracking and Validation**



### Supplier

- Uploads data on antibacterial fodder
- Cow is tagged with RFID chip, proving free range

### Producer

- Gets information on cow and designated beef products, cuts and prepares meat accordingly
- Adds QR code to packaging

### Distributor

- Automatically receives notification about receipt of beef products
- Chooses suiting 3PL based on fully available data on customer, delivery date etc.

### 3PL

- Is informed about origin and destination of beef products
- Reviews instructions how to store the products
- Flexibly optimizes network flows

### Retailer

- Runs machine learning-based forecasting
- Adds potential recipes & wine suggestions to the data record
- Provides app for endcustomer

### Store

- Has full transparency on delivery time
- Adapts orders, promos, etc. accordingly

### Customer

- Scans QR code via app
- Gets insights into beef origin, ageing duration, etc. and suited recipes and wines
- Earns points in cross-company loyalty program

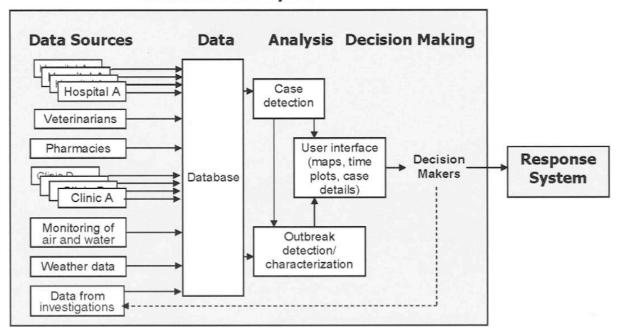




# Data Analytics / Machine Learning - Example: Biosurveillance

 Biosurveillance primarily focuses on developing effective surveillance, prevention and operational capabilities for detecting and countering biological, chemical and agricultural threats.

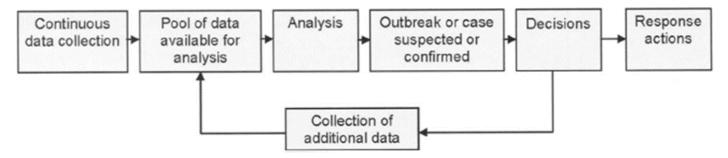
**Biosurveillance System** 







## Data Analytics / Machine Learning - Example: Biosurveillance



- DHS continues to enhance data analytics and machine learning to utilize realtime data streams (i.e. animal and livestock health) to identify variations and trigger points for faster, proactive action.
- By utilizing information sharing and publicly available and reliable data sources, DHS is able to monitor trends to consistently adjust the baseline and identify trigger points that may signal an upcoming danger.
- Using these capabilities, DHS is assisting in the reduction of reliance on the timely identification and reporting of threats by other countries





### **Current State**

- Financial Management Transformation (10yrs+ timeline)
- Migrating to one general ledger system
- Advana standardizing and cleansing data

# **Challenges**

- Culture
- Integration
- Resources (\$\$\$, People)



