NSF OIG CORNER

Data – Is it working for you?

By Ruth Gonzalez

Proactive data analytics can help institutions test their accounting systems, evaluate controls, and identify weaknesses that could lead to audit findings. In this article, we'll discuss how proactive data analytics can help you improve controls and enhance grants management.

Have Data Work for You

Our report, *Promising Practices for NSF Award Management,* notes that many recipients claimed they would have identified unallowable expenses during the grant's close-out process. However, we found that recipients were less likely to charge unallowable costs to NSF awards if they implemented processes for the continuous monitoring of high-risk expenses, rather than waiting until after the award expired to review the allowability of the expenses charged.

Data Reconciliation

You may be surprised to learn that a request for accounting system data and accompanying reconciliations can take months for an institution to provide and are often the catalyst for uncovering deficiencies in an institution's control environment. A reconciliation may reveal that there are not enough expenditures in the institution's financial records to support the amount received from the government under a federal award. Conversely, if there's a cost overrun, institutions may struggle to identify the specific costs making up the payment request. Proactive analytics in the form of routine reconciliations can help identify these issues. Recipients can use that information to improve their control environment. Additionally, if your organization undergoes a financial system conversion, it is important to consider how data will be pulled from both systems and deconflicted.

Indirect Cost Allocation

Our audits often find that recipients incorrectly apply indirect costs to the Modified Total Direct Cost (MTDC) base or use the wrong indirect cost rates. For example, even though participant support costs should not be included in the MTDC base calculation, some recipients do not segregate these costs from the base. To help prevent audit findings related to indirect costs, recipients could use data analytics to evaluate **1)** whether the list of costs that receive indirect cost and fringe allocations properly aligns with those outlined in the Uniform Guidance and/or other applicable guidance, **2)** whether the correct indirect cost rate was applied, and **3)** that the associated indirect/fringe costs are removed when direct cost items are removed from an award. If variances are identified, corrective entries can be made, and system controls can be adjusted.

Participant Support

Another finding we frequently observe is related to transferring funds budgeted for participant support costs to other budget categories without first receiving NSF's approval. Proactive analytics can track amounts spent by budget category and help identify when you may need to request approval from NSF to re-budget participant support funding.

Proactive data analytics can help prevent many common audit findings. Let data assist you in your oversight responsibilities, indicate if controls are working as intended, and help you identify areas where you can enhance grants management.

To report research misconduct or other forms of fraud, waste, abuse, or whistleblower reprisal, please contact us by:
- **Web:** https://oig.nsf.gov/contact/hotline
- **Anonymous Hotline:** 1-800-428-2189
- **Email:** oig@nsf.gov
- **Mail:** 2415 Eisenhower Avenue, Alexandria, VA 22314
  ATTN: OIG HOTLINE.

Ruth Gonzalez *is a Data Analytics Project Manager for the Compliance Analytics team in the Office of Audits at the National Science Foundation OIG. She started her federal career in 2010 at the Department of Homeland Security OIG and joined NSF OIG in 2016. She can be reached at* **ragonzal@nsf.gov**.

Have a question or an idea for NSF OIG's Corner?
Please contact us at OIGPublicAffairs@nsf.gov