

Grants Tracking and Reporting



Altum

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Executive Summary

Directors of Federal grant-making organizations are faced with an increasing number of inquiries from Congress, activist groups, associations, the media, and the public about the value received for the grants funded by their organization. These requests for information include the amount spent, where it was spent, and what specific results and accomplishments were achieved. The growing number of inquiries, as well as the increasingly unpredictable nature of the requests, demand effective use of information technology, query tools, and reporting software to quickly and accurately respond to these requests.

This white paper describes techniques used by various organizations to track, categorize, and report on grant programs. It is the result of numerous interviews with federal agencies including the National Institutes of Health, the Department of Energy, the Department of Commerce, the Centers for Disease Control and Prevention, and the Department of Education. It summarizes lessons learned and best practices in grants tracking and reporting.

1 Introduction

Federal granting agencies award over \$300 billion in grants each year. Consequently, federal agencies are implementing standard procedures and deploying information technology systems to administer, track and evaluate their grants programs from start to finish. While many agencies have invested resources in managing the grant process from request for application to award, relatively few of them have invested a proportional amount of effort to address post-award query and reporting needs. The demand for accountability of and rapid access to information on grants programs has increased tremendously over the past few years. In this paper, we explore the various ways federal agencies track and report on their grant programs.

2 Categorizing Grants

The first step in being able to track and report on grant programs is to establish a process or system to categorize grants. Our interviews with numerous federal agencies revealed a wide variety of systems used for categorizing grants into the various program areas (or reporting categories). These systems ranged from simple Excel spreadsheets to \$40M enterprise applications and databases. The technology used for tracking grants is dependent upon two variables:

- The number of applications and/or grants awarded
- The number of categories that the grants are classified into

In general, a combination of the number of applications, grant awards, and/or categories dictated the level of technologies required. For instance, an agency with only 200 grants to categorize into 4,000 reporting categories requires a system of similar capabilities to an agency with 4,000 grants, but only 200 reporting categories.

In addition to the raw number of grants and associated categories, there are a number of other considerations to take into account when dealing with the categorization of grants. In particular, agencies need to consider the following:

- Central reporting needs
- Program specific needs
- Personal resources needs

2.1 Central Reporting Needs

Many federal agencies are required to report on a number of grant program categories across all centers, divisions, branches, or offices within the agency. Typically, this information is a subset of the number of categories an individual program office needs for program management purposes.

An agency deploys cross-agency categories in various ways. Some agencies provide cross-agency categories where each program office decides their own definition of the term. For instance, at the National Institutes of Health, the agency is required to report on the amount of funding and number of grants awarded for research on Alzheimer's. They collect and consolidate detailed information from the individual Institutes and Centers (ICs) on Alzheimer's grants, but allow the National Institute on Aging and the National Institute on Neurological Disorders and Stroke to define Alzheimer's independently. This is necessary because science is not well defined, and there may be differing opinions on whether a particular research focus is related to Alzheimer's. It often takes an enormous level of effort to develop category definitions that all constituents agree upon.

Other agencies provide definitions with the categorizations. In cases where definitions are provided, either a central steering committee at the agency creates the definitions, or a national organization creates the categories for the agency. For instance, in the case of the

National Institute for Occupational Safety and Health (NIOSH) at the Centers for Disease Control and Prevention, the National Occupational Research Agenda (NORA) was created and includes partners in the public and private sectors. Approximately 500 organizations and individuals outside NIOSH provided input into the development of the Agenda and the 21 priorities on which NIOSH reports. In cases where central definitions are created, only a small number (less than 100) of broad terms are defined for enterprise-wide use.

2.2 Program Specific Needs

Although much of the grants tracking and reporting needs are focused on agency-wide reporting categories, there is typically a need for each program office or division to track grants in categories used for internal management and reporting purposes. Often, these categories are at a finer level of detail than the agency-wide categories. As a result, many program offices have individual systems outside of the enterprise grant tracking system to allow for program-specific categorization and reporting of grants programs. Categories are determined and defined by the individual program offices. The defined categories allow the program offices to query and report on grant information for various reasons such as responding to direct legislative requests, preparing for conferences, and developing annual reports. These categories are also used to generate detailed grant listings to support reporting of the central agency-wide categories.

2.3 Personnel for Grant Categorization

One final aspect taken into consideration when designing a tracking and reporting system is who will be responsible for performing the grant categorization. At NIH, this process is often called scientific "coding".

The scientific coding responsibilities are typically delegated in one of two ways:

- Distributed - Each grant is assigned to a single person, the scientific or program director responsible for the scientific aspect of the grant. These individuals apply the appropriate scientific categories to the grant.
- Centralized - A single individual or set of individuals are assigned to categorize all of the organizations.

Increasingly, we are finding that the centralized personnel model for grants categorization is the preferred method. There are two main reasons for this:

- Program or scientific directors have many duties outside of scientific coding that make it difficult to spend the time required to accurately and consistently code grants.
- Dedicated staffs often follow an established procedure that facilitates more consistent coding across the organization.

The best of both worlds would be to implement a system where a central coding organization is responsible for "official" grant categorization; while being flexible enough to allow individuals the ability to categorize grants for their own use.

3 Reporting Techniques

Our research has revealed two main techniques that agencies use to create reports in response to requests for information:

- Specific Categories - The easiest method is to use a specific category already in the system.
- Ad-hoc queries - If the specific grant category is not already in the system, ad-hoc queries that combine grant categories and/or text searches for keywords are used to find the appropriate grants.

Regardless of which technique is used to identify grants for a report, the results are typically reviewed manually before sending the final results.

3.1 Specific Categories

Grant categories are selected by federal agencies to meet the needs of most of their constituents. As a result, standard reports generated by the system and/or queries for grants in the specific categories are sufficient for the majority of reporting needs.

3.2 Ad-hoc Queries

In many cases, standard queries and reports are not sufficient for responding to the requests for information. For instance, the request could be “How many grants and how much funding has been given to research on tobacco usage by adolescents in the state of California?”. In these cases, ad-hoc queries using pre-defined categories, as well as text searches of grant titles and abstracts, can be combined to determine the results. In both cases, it is important to fully document both the details of the request as well as the results.

4 Lessons Learned

The importance of being able to respond quickly to requests for information on grants programs has grown over the past few years. Federal agencies have implemented a number of processes and systems to meet these needs. In developing these processes and systems, several lessons learned and best practices have evolved. The following recommendations are suggested to all agencies:

- **Re-engineer first** - Re-engineer the process before developing requirements for the system to be developed.
- **Use cross-functional teams** - Design the system with participation from all parts of the organization.
- **Create a flexible system** - Design the system to serve both the enterprise and the individual user.
- **Limit and define enterprise-wide categories** - Limit enterprise-wide categories and ensure solid definitions for categories are developed.
- **Use dedicated staff for grant coding** - Use a dedicated staff to categorize grants for the enterprise.
- **Define and document all requests for information** - Ensure that you understand the request for information and that it is effectively documented for future retrieval.

4.1 Re-engineer First

Old habits are hard to change. The most successful systems start with looking at the business process and making the changes *before* creating a system to streamline and automate the process. Too often, systems are developed before or as a part of the business process re-engineering (BPR). If the system is developed before BPR, then the agency is automating old, perhaps inefficient, processes. If the system is developed while doing BPR, change is associated with the system and it is more difficult for individuals to adopt it, as they have to learn a new business process as well as work with the new technology.

4.2 Use Cross-Functional Teams

When designing the new system, ensure that all stakeholders that will be using the system are involved. By doing this, the various user communities have the opportunity to work together and better understand the responsibilities of each group and why parts of the system they may not feel are important are critical to other users of the system. Cross-functional teams also build commitment from all parts of the organization to ensure a successful design as well as implementation of the system.

4.3 Create a Flexible System

Grants tracking and reporting systems should be created with the flexibility to serve the needs of all parts of the organization. In that manner, groups can track and report on grants for the entire enterprise and individual users can track and report on grants for their personal portfolio management.

4.4 Limit and Define Enterprise-wide Categories

Definitions for enterprise terms and categories are difficult for many parties to agree upon. In addition, as requirements evolve quickly, definitions need to be maintained and modified as necessary. At the same time, there is an obvious need for agencies to report on specific categories across the entire organization. To effectively report on enterprise-wide categories, it is important that solid definitions be developed. To best balance these needs, we recommend the following:

- A central group of experts should be assembled to create, define, communicate, and maintain categories.
- The number of enterprise-wide categories should be limited as much as possible. The fewer the number of specific terms needed, the less time it will take a central committee to create and maintain unified definitions.

4.5 Use Dedicated Staff for Grant Coding

Our research has shown that using a dedicated staff to categorize grants is typically more successful than distributing the coding of grants to individual program directors. There are two main reasons for this:

- Program or scientific directors have many duties outside of grant categorization that make it difficult to allocate the required time to accurately and consistently code grants.
- Dedicated staffs often follow an established procedure that facilitates more consistent coding across the organization.

4.6 Define and Document All Requests for Information

Finally, for the results of these systems and processes to be successful, it is important to perform two tasks when responding to any request for information:

- **Define the request** - It is important to fully understand the request. What is the requester's definition of "private institutions" or "minority health?" Ensuring that the specifics of the request are fully understood is essential.

- **Document the results** - Once a response has been sent, it is important to ensure that all parts of the response are documented for future access. In particular, the request itself (who requested the information, what the request was, the date of the request) should be stored with the actual delivered results and the methodology used to generate the results (i.e. how “private institutions” was defined, and how were the results retrieved from the database). Full documentation ensures that future requests for similar information are easily generated in a consistent manner.