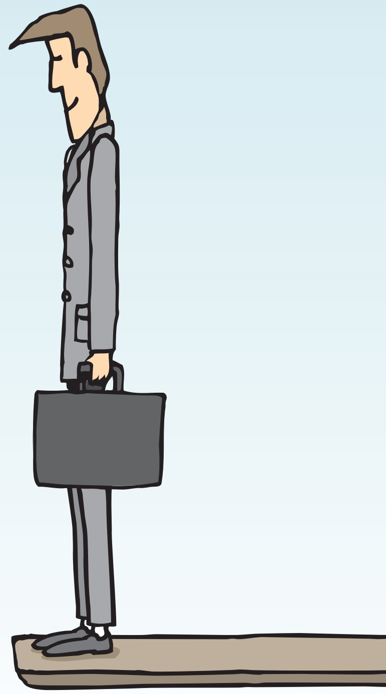
Using Data To Springboard into Process Improvement



By Angie Mitchell and Natasa Raskovic

Research is an important element of a university's strategy. Not only does it help attract funding, but it engages faculty, staff, and students, makes contributions to society, engages the local community, and collectively elevates the reputation of the university.

As a central administrative office, our mission is to add value to the university by serving faculty, staff, and students through transparent and efficient processes that facilitate research and other activities. One way to create additional value for research functions and activities is to extract data in a useable format so that it can be accessed, analyzed, and shared. At the same time, data related to research administration activities can be used for identifying opportunities for process improvement.

Managing data in-house enables the organization to be self-reliant and save time by allowing users to quickly and easily obtain data without going to other resources. This information may also be shared with a single unit or with other units within the organization.

Plunging into data for decision making is not an unfamiliar concept. For example, we use our minds to process daily schedules such as time to wake up, eat, go to work, exercise and sleep. The mind often does not even realize it is calculating the information to make routine decisions. This shows the importance of data in everyday life. Having data readily available allows for self-reliance and gives the opportunity for proactivity. Data provides the means to quickly adapt in an ever-changing environment by allowing a person to make informed decisions. Data allows us to be responsible stewards of the projects we monitor both personally and professionally.

The research administration community swims through waves of data to assist in the monitoring of all pre and post award activities, bridging the gap between the researchers and the research administrators. Data has the ability to mitigate the stress of the dreaded audit by increasing the accountability for compliance. For example, generating reports allows us to ensure compliance with applicable regulations and requirements for sponsored projects.

The research administrator is able to wade through all the data available to create an efficient method for managing and monitoring all pre and post award activities. The source of data can be collected and analyzed internally or externally.

A pre award administrator can plummet into data to develop a time management plan by forecasting times of high demand. In addition, data helps to recognize untapped research opportunities. Cross referencing data related to researchers' areas of expertise and interest can encourage an interdisciplinary collaboration. This collaboration has the ability to create a new perspective on an area of research, making a "stand-out" proposal.

A post award administrator can use data to make decisions regarding billing, collections, reporting, and deadlines. Reports created from an internal database can show the unbilled awards of an entire department or receivables not collected. This sample data can be helpful to determine the high-risk areas, prioritize billing, and assist with workload management.

In addition, sponsors provide external data that can be compared to internal data. A sponsor provides information on the cumulative amount spent on a specific award. That report can be compared to internal reports reflecting the cumulative total of expenditures. Comparing such data would allow any discrepancies to be caught at an early stage, making corrections much easier.

Managers use data to identify strengths and weaknesses of an organization. Data can be used to control, change, and implement internal processes in order to create a more streamlined and efficient way of doing business.

The ever changing world of the research enterprise forces management into continuous process improvement. Streamlining the business process requires reevaluation of old practices, and process improvement based on efficiency and effectiveness. Data diving is instrumental for identification of process improvement opportunities, as well as development, testing and monitoring of process improvement solutions. To demonstrate, an office can collect feedback on customer service using an online survey tool, emails, and personal contacts. The data can be used to identify opportunities for improvement in operations.

A real life illustration of using data collection and analysis for process improvement was the identification of a bottleneck in the award set up process. The following steps were used:

- Define the problem using customer feedback
- Analysis of the current process using existing turnaround times for award set-up
- Pinpoint the problematic areas
- Generate possible solutions
- Test the solution by collecting new data for a sample
- Implementation
- Continuous monitoring and evaluation

As a result of taking the above steps, a new process and format were established for award set up. The new process promoted clearer, consistent, and accurate communication.

When using data for process improvement in operations, it is important to keep in mind that data is not stagnant, it is constantly evolving. Points to remember:

- Data should be functional and be focused, Only collect what can be used and analyzed
- Data should be trustworthy, “Junk in , junk out”
- Data should be relevant, qualitative vs. quantitative
- Data should be organized
- Data should be monitored on a regular basis
- Data should be interpreted, tell a story

Regardless of its source, personal informal communication, online survey, or databases, data is essential for the any research administrator. Constantly collecting, analyzing and reevaluating data helps to successfully deal with the challenges of an ever changing environment. The proper use of data in process improvement has the power to spring board units into achieving the goal of higher efficiency- doing more with less.

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