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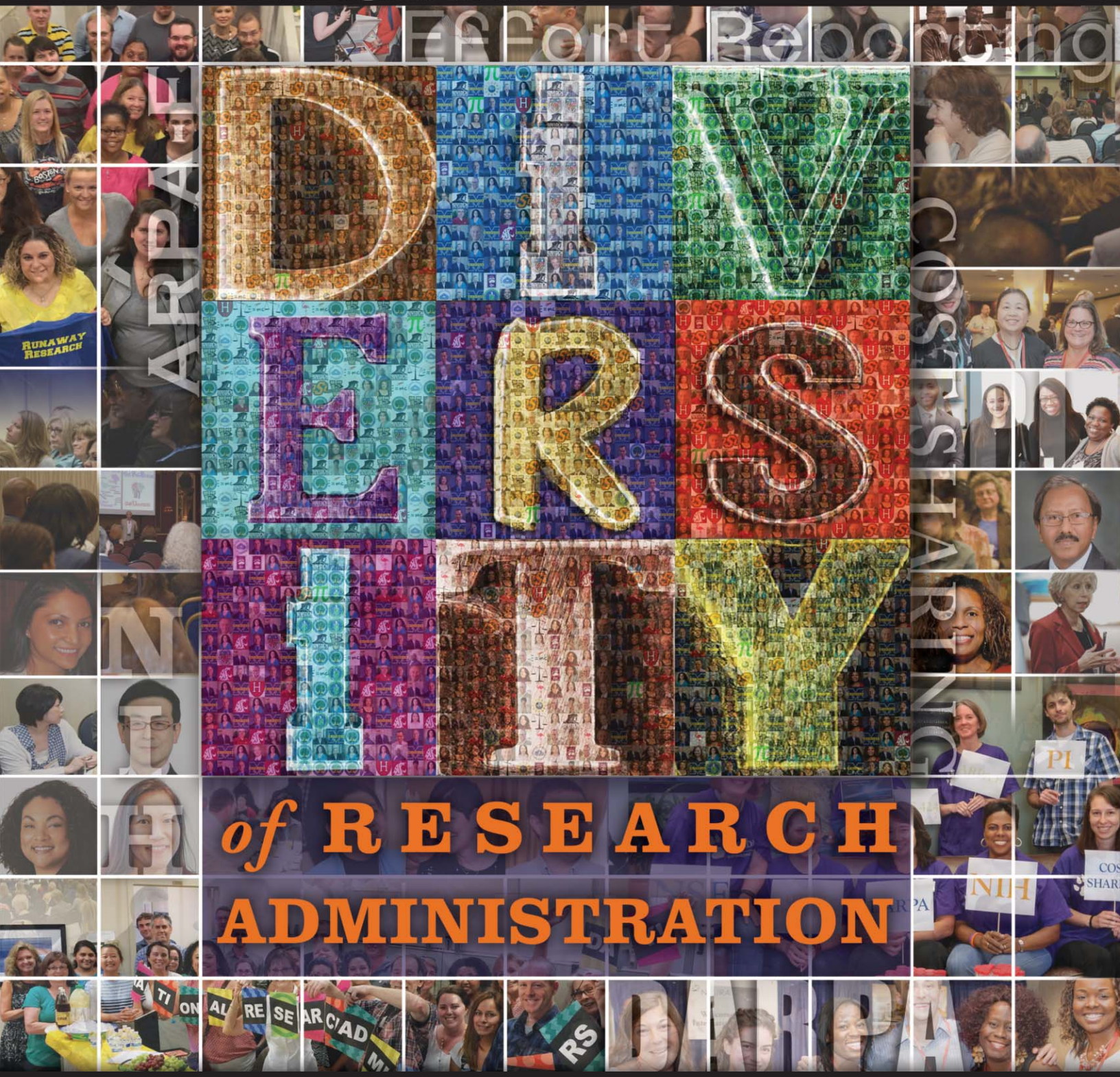

ALSO IN THIS ISSUE

The Crazy

There is plenty of diversity within university research administration, but one way in which there is astounding variance is how administrators manage and track their sponsored research and research compliance processes. Additionally, size and resources also vary - from universities with tens of millions in total awards, to ones in the low thousands. The volume of a university's research expenditures makes a great impact on its quality of research administration as a whole. However, despite size and research volume, we are finding that institutions of all sizes share many of the same core challenges. One of the current core challenges on the front burner is the patchwork nature and lack of integration of all the solutions on which they depend to get their jobs done well. While the nature of the data and the overall pain points may be relatable across each institution, the methods that are complicating and frustrating the core of their administrative work vary widely. What most end up with is a crazy quilt solution where every square has its own unique pattern, but it lacks an overall design on the whole, each piece only loosely stitched to those adjacent to it.

The first method we see, and often used by smaller institutions, are spreadsheets. It is a straightforward solution, which costs very little and can be reasonably managed as long as the volume of research stays very low. While spreadsheets can work wonders for business of all kinds, it takes plenty of determination, industry insight, and a tech-savvy hand to ensure that the research administration process all comes together properly. With no guide other than your own wits, it is far too easy to make mistakes using this method, perhaps not even realizing the error until much later. On top of this, the sheer amount of time that it takes to manually enter the data, organize the information, and keep all of this running smoothly can amount to far more than one might expect.

On the larger end of the spectrum are universities with a multitude of grants and millions of dollars who turn to large enterprise or eRA (electronic Research Administration) systems to help them manage the vast amounts of data and enable administrators to do more with their time by automating as many processes as possible. In contrast to the spreadsheet system, software that is built specifically for research administration helps to ensure no gaps are left in the process and that possible errors are avoided. Some eRA systems even include enhanced features like shareable reports and customizable dashboards, which add incredible value and saves administrators a great deal of time.

In the middle of the spectrum is the method of homegrown database systems. As budgets shrink, the demand to do more with fewer resources has become a way of life. Where a university with a low volume of research might be able to manage awards with spreadsheets, an increase in volume quickly demands that the power of databases/database concepts be utilized to optimize efficiencies with available staff. As one might imagine, a university does not simply move from a small to large volume of research overnight. It is a gradual process that can happen at varying rates of change. It may not even happen intentionally, but simply one small fix at a time; which adds up to a custom solution that gets the job done, though sometimes in a rickety and jumbled manner. Without dedicated programming staff, another challenge of this method can be version control, where administration staff struggles to ascertain which set of documents is the most recent. Not knowing where things are with looming proposal deadlines can be a quagmire. While counting on your IT team to form a more efficient solution may be convenient, it is important to remember that they are specialists in delivering technology, not building their own software. Having your internal IT team build a homegrown database for grants management often results in solutions with odd technical restrictions, compelling the office to adopt unorthodox processes. When these universities eventually decide to migrate to an eRA solution, they may take these processes with them, which can require expensive customizations to the software. Ultimately, the risk is that deadlines for project reporting, cost extensions, modifications, and regulatory compliance are not being met.

And when all is said and done, many universities are now stopping at these evaluation points to realize that they may use all three of these methods! A spreadsheet here, a small ancillary tracking system that is homegrown over there, with maybe one eRA module used by only a select group to create a system that still doesn't mitigate the compliance risks. Their patchwork solution has sewn all of these disparate methods together.

When you get down to basics, Research Administrators need to reliably track information by people, by departments, and by project/award.

Information in the HR/person database includes everything from the standard identifying information including salary, date of hire and supervisor, but also more esoteric information as to whether the individual has a visa (including type and expiration) or security clearance. Individuals accrue vacation and sick leave balances, the tracking of which is sometimes left to the department to track. As such, modules must be built to request/report absences and compute the remaining accrued vacation and sick leave balances.

Information about the Project includes standard information such as sponsor, award information, type of award (R01, etc.), and increments of funding, but also information about restrictions and reporting requirements as outlined in the terms and conditions of the award. Project level information also included research compliance (IRB, IACUC and Conflicts of Interest). Within these criteria there are those who have a financial system

QUILT of Solutions

By Nancy Watterson-Diorio, Randy Ozden, and Cheryl Birch

managing the request and tracking of purchases yet these systems rarely integrate well to provide a dashboard of all information to effectively manage the post award administration of these awards.

The intersection of people and projects enables you to identify PI and other account approvers, create budgets, project costs to confirm sufficient funding exists for the tasks at hand (as the research progresses), verify and approve travel and certify costs and effort retroactively. In connecting people to projects through cost projections, you can easily feed your payroll system the appropriate cost allocations, as well as prepare the data required for effort certifications.

Whatever the current solutions are, the reality is that what most universities are trying to achieve is to sync, integrate, communicate, interact, and compliment all of these processes in the most efficient and comprehensive way. In addition, it needs to be secure, auditable and flexible over time. The best solution allows central management of the university to have available information/reporting on the University's entire portfolio of research. In order to achieve a coordinated university-wide solution, the first step is to build an effective business case to help with understanding of all the different workflows and processes in their current state. In review of these system approaches, a level of risk should be assigned that aligns with compliance, and if applicable, regulatory requirements for federal awards. Should the business case result in a recommendation for a more effective software solution that would help with the collection of information, it is recommended to document the steps that could lead to the development of a requirements document to find an eRA to manage the system. This would quicken the pace of going out to bid to begin to build a future solution. Often a strong business case is all that keeps an organization from reaching the next level. It seems that the larger the organization, the more levels of approval would be required. This business case which includes the following will be the catalyst for making such a change if there are associated costs or eRAs identified.

- Identifying current business process that must stay and collecting those requirements from multiple users
- The process of evaluating eRAs
- Project management and identifying the right project team
- The cloud vs. on-premise deployment
- Planning your IT budget

Streamlining the procurement process will set an organization up to begin the implementation process in a thoughtful and comprehensive way. It will avoid scoping issues and help to manage expectations. Though in the past eRA systems were usually limited to institutions with substantial research volume and large budgets, new cloud-based technologies are making comprehensive research administration solutions available to medium and even smaller sized institutions. If you have a crazy quilt solution that is holding you back, take the initiative for your team to identify your organization's top requirements and translate them into an action plan for moving forward. Collect and understand the tools and resources to weigh the options and review these resources used by your colleagues.

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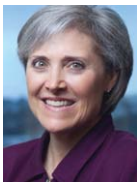

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