



Client Success Story

Collaborative Innovation:

How Deloitte and Washington State University Collaborated to Create a Strategic Grant Forecasting Solution

Powered by Workday Adaptive Planning

In July of 2023, Deloitte and Washington State University saw an opportunity to meet a persistent need in the higher education grant management community facing principal investigators and research administrators alike. That need, was a grant management forecasting tool that combined life-to-date budget and expense data for a given award or grant, along with the capability to forecast and give 'what if' scenario planning and management for that award's financials.

Many universities struggle with the management of grant funding due to the differences that exist between standard annual operating funds and other state appropriated or university-specific sources of funding being managed in a university's budget. There are various complexities involved in managing grant funds which include federal, state, and sponsor regulations and requirements, facilities and administration cost considerations, and

award-specific periods of performance that typically do not align with fiscal years, causing accurate grant forecasting and management to be difficult in university-provided fiscal management tools. Seeking to leverage the existing tools and platforms currently in use at the university, WSU needed a powerful tool that could combine the enterprise financial data at the institution with grants specific logic and requirements to accurately forecast and manage funds for the life of the grants in their portfolio.

With these needs in mind, Deloitte and WSU collaborated to design and develop a grants management forecasting tool that would be an industry-leading example that leverages technology to improve the stewardship of sponsor funded research dollars at the institution. The designed solution would utilize Workday Grants Management and Adaptive planning to:

- Forecast facilities and administration (F&A) costs based on eligible direct cost projections
- Project accurate salary and benefits expense including hourly workers and realistic worker-specific benefits rates
- Provide the ability to manually enter encumbrances for expenses not already obligated in Workday, and manually enter anticipated budget changes
- Allow users to experiment with what-if scenarios to determine the best use of funds
- Accurately calculate and forecast all direct and F&A impacts to overall budget to show a precise remaining balance

The successful collaboration would create a pioneering solution that displayed the possibilities when leveraging Workday Adaptive planning, Workday Grants Management and Reporting to enhance grant management and forecasting capabilities.

Background

Founded in 1890, Washington State University (WSU) is one of the oldest land-grant universities in the Western United States with over 25,000 students offering 200+ programs across five physical campuses across Washington State and a global virtual campus. As a growing research institution, WSU also has 4 research and extension centers, 10 research farms and 40 county and tribal extension offices throughout the state and is an R1 research institution with over \$368 million in annual research expenditures.

In January of 2021 in collaboration with Deloitte, WSU successfully went live on Workday HCM, Payroll, and Finance. The successful collaboration helped WSU modernize their systems while retiring decades old legacy mainframe systems and processes. To further expand its Workday capabilities, WSU again collaborated with Deloitte to implement Workday Adaptive Planning to

enhance its planning and budgeting capabilities and this initiative successfully went live in April of 2023.

Later in 2023, Gerik Kimble, Executive Director of Business System Operations and Process Improvement at WSU, approached Deloitte with an idea to create a tool within their existing Adaptive Planning instance that not only meets a common need for a grant forecasting tool for the research community at WSU, but could also serve as an example and a tool leveraged by universities across the nation utilizing Workday and Adaptive planning platforms. With the recent successful implementation of both Workday and Adaptive planning, WSU wanted to capitalize on the strong relationship with Deloitte and continue the collaboration to design this new tool and improve the management and stewardship of their growing research portfolio.

Challenges

Why invest in this tool?

At the time, WSU had no central decision support tool for grants management that could answer common questions that Principal Investigators (PIs) and research administrators face such as, “Can I hire another grad student, and how will this impact my budget?”. “How will this large equipment purchase impact our burn rate?” WSU Researchers and administrators needed a tool for forecasting and scenario planning that not only enabled review of grant available balances but also enabled them to plan for the effective management of their grant funding.

Before selecting Workday Adaptive Planning, WSU also considered using Workday Worksheets and other tools to meet the need but found that they did not have all of the features that their research community needed such as the ability to schedule reports, view forecast results on a dashboard, and create personal scenarios. They also considered Tableau and Workday Prism Analytics as potential tools but ultimately chose Workday Adaptive Planning given that it was already used by the university for annual budgeting, and offers a comprehensive set of capabilities that enhances planning processes. Additionally, including grants data in the same system as other annual budgets lays the groundwork for future combined reporting on all funds.

“We took feedback from Grant Managers and listened to consistent feedback from partners”

according to Christine Galbreath, Grants Workstream Lead at Washington State, on the impetus to reach out to Deloitte to collaborate on building this tool.

The Solution

WSU and Deloitte embarked on a project to create WSU’s first ever enterpriselevel forecasting tool, aiming to replace traditional spreadsheets and costly shadow systems.

Recognizing the needs of WSU faculty, Matt Skinner, Senior Associate Vice President for Finance and Deputy CFO, eagerly supported the innovative concept. “As we engaged with other research universities, we discovered that they faced similar challenges. This realization further inspired us to develop a pioneering solution to meet the needs of WSU faculty,” Skinner shared. “We knew that we needed the right partner to help us achieve this.” The WSU team engaged Deloitte to help design and implement a tool that maximizes their investment in Workday Adaptive Planning and leverages the robust grants configuration developed by WSU and Deloitte in Workday Finance to meet the unique needs of the research community.

The Opportunity and Collaboration

Grants forecasting is a major need among higher education institutions that when done, is cumbersome and lacks standardization. Deloitte team members from the original implementation teams for Workday Finance and Adaptive planning had significant knowledge of WSU’s Foundation Data Model, system configuration, and reporting capabilities and enabled Deloitte to hit the ground running with a design team that had significant institutional knowledge and experience. The benefits of the collaboration allowed for an aggressive timeline for design, testing, and implementation.

With the objectives set forth to build a forecasting solution that enabled researchers and research administrators to forecast grant spending, including salary and benefits by person along with nonpersonnel costs and the ability to accurately forecast facilities administration (F&A) costs, Deloitte and WSU began the design and build of the forecasting tool. The tool recognizes award dates and award budget periods that do not align with the standard operating fiscal year, in addition to the various institutional rate agreements that drive the millions of dollars of F&A costs and F&A recovery amounts.

To accommodate the design, Workday reports were designed to extract data and load Adaptive with:

- Budget, commitments, expense, and data by grant/object class
- Costing allocations for all people paid on grants
- Benefit data by person/grant
- Award attribute data such as F&A rates and award line dates

Additional key features of the tool are:

- The capability to calculate Facilities and Administration costs based off of F&A eligible projected direct costs multiplied by the F&A percentage on the award line
- The capability to obligate salaries and benefits for the full period of any current and future costing allocations using the worker's average benefits rate for the prior six months
- The inclusion of payroll projections for hourly workers
- Salary cap calculations brought in for projecting salary capped investigators
- The ability to add manual budget projections and encumbrances for expenses not already obligated in Workday
- The ability to forecast for cost share

The forecasting tool presents users with three primary tabs of data related to their grant:

1) Grants Data & Budget tab:

This section provides demographic data about the grant and the award it is associated with including PI, F&A Rate, and current budget data with the ability to update the budget for forecasting purposes.

2) Grants Forecast tab:

This section gives the user the capability to project expenses that are not obligated or incurred in the actuals or commitment data integrated from Workday.

This section of the tool also includes the salaries and benefits calculator by position.

- Salaries and benefits calculator, costing allocation portion –
 - Labor is typically the biggest cost on many grants. This tool helps answer questions like “Can I afford to hire another grad student?” or “How will recent wage increases for research assistants impact my award budget?”
 - Cost center, grant, position, Institutional Base Salary (IBS) rate (annualized), base pay (annualized), annual work period, blended FTE, distribution %, average benefit rate (fringe rate), begin date, end date – how much more of their salary is left to be incurred on this rate
 - Update end date to update forecast for expense (e.g. add two years to the grant), once saved forecast is updated in real-time; more salary/benefits are added

Approach

Implementation Approach and Timeline

Due to the existing relationship between Deloitte and WSU, an aggressive timeline was established for the implementation. Deloitte's initial grants lead from the Workday implementation in 2021 along with the Deloitte Adaptive lead joined experienced business systems analysts for grants and finance from

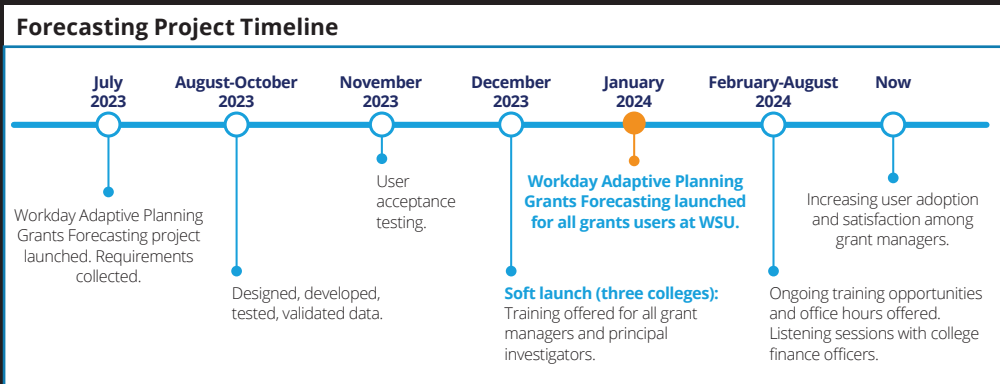
03) Reports

The reporting section brings all the forecast data together for analysis and provides several views of the data including key reports as well as charts/graphs for projected balances and expenses. Key reports include:

- Reports for:
 - Grant Forecast (by Object Class): see in one view by object class: budget, actuals to date, Workday commitments/obligations, forecast, projected balance and Variance %
 - Grant Forecast (by Grant): Displays budget, actuals to date, Workday commitments/obligations, forecast and projected balance at the Grant level; can be run by Cost Center, PI, or Award to show total balances for a portfolio of awards.
 - Grant Forecast (by Object Class) – Grant PI or Award Workbook: a repeating report that produces one Excel spreadsheet with a workbook tab for each Grant in the PI's portfolio. Each tab displays the Grant Forecast (by Object Class) report for that grant.

WSU's Modernization department, creating immediate synergy between the WSU and Deloitte teams.

After the framework of the initial design was established, WSU conducted discovery and design workshops with several colleges across WSU including the Elson S. Floyd College of Medicine, the College of Veterinary Medicine, and the College of Agriculture, Human and Natural Resources.



During these informative sessions, WSU found that:

- Many Grant Managers used their own Excel templates and pulled data from multiple reports in Workday, in some cases utilizing additional shadow systems
- The timing of how users forecasted was different – the majority produced forecasts on a monthly basis; others on bi-monthly basis; and a few used “just in time reporting”
- Within Workday, users already had effective budget-to-actuals reporting to produce a snapshot for things that have been done but lacked Workday-integrated tools to help answer questions about the future, and relied on shadow systems to perform what-if analysis
- Some Grant Managers were not forecasting regularly due to time constraints and lack of resources

Overall, the main pain points illuminated in the current state processes were:

- Extremely manual process previously managed via offline spreadsheets by Grant Managers
- The learning curve for Grant Managers to learn how to effectively forecast for a specific PI were high
- There was no connection between forecasts and plan in Workday
- There were disparate tools, offline spreadsheets, and multiple data sources that needed to be compiled to produce a forecast
- PI's that managed grant portfolios across colleges lacked the ability to see consistent reporting and forecasts across colleges
- Grant Managers supporting interdisciplinary projects across departments lacked visibility into forecast information for the grants outside of their college
- Taking this user feedback, the WSU/ Deloitte design team leaned into an iterative approach of design, configuration, and testing seeking to address the various pain points identified by users.

Change Management and Adoption

Over the course of implementing this new solution, WSU and Deloitte worked to respond to user feedback and provide support to users as they transitioned to the new system. This involved managing change and considering the variety of prior user experiences with grants forecasting. WSU's Modernization team has invested time in supporting users to understand navigation within Adaptive, provided additional training opportunities, and partnered with area finance officers to understand barriers to user adoption and create plans to overcome them, while also receiving and acting on feedback from users. These efforts have resulted in increasing user adoption across a broad range of colleges, large and small.



The Impact

The WSU grants forecasting tool has significantly streamlined the forecasting and planning processes for grants, standardizing how researchers and administrators plan for future funding, promoting efficiency, and providing deeper insights into future research opportunities. It has increased precision with projected amounts for salaries, benefits, and hourly workers. The tool's beauty lies in its ability to provide everyone with the same baseline, thereby reducing mistakes by eliminating the need for different reports and spreadsheets. For Grant Managers, it has significantly reduced the time and manual effort required to produce reports for their PIs and has provided uniform reporting for large colleges, ensuring that all PIs see the same report. This intuitive solution facilitates enhanced decision-making through immediate access to data-driven insights and offers what-if scenario planning capabilities.

Among the most beneficial features of the new tool is the salaries and benefits sheet, which has helped researchers proactively manage costing. This is particularly useful for researchers managing multiple grants simultaneously, as it allows them to keep up with the numerous costing allocations that they need to perform. The tool also enables users to run a dashboard by PI to view all costing allocations, which inspired the development of similar reports in Workday.

End users have praised the tool's functionality. Some users highlighted the ability to adjust future expenses in real time in meetings with PIs, instantly see the results in reports, and make changes right away, whether increasing/ decreasing summer salaries or planning travel. Others appreciated the capability to run the report by PI rather than individual grant lines, which helps review staff costing allocations as a unit and aids in making better decisions about staff time allocation, catching potential issues early.

These benefits have enabled many departments to discontinue shadow systems in favor of forecasting in Adaptive, reducing costs to their units, and increasing time savings.

Future Outlook

Looking ahead, the solution has the potential to evolve and adapt to future needs within the industry. The initial release has already sparked new requests from various units on how it could be applied to other accounts, such as programs, gifts, and other funding sources, highlighting the need for forecasting capabilities across all types of funds. Additionally, there is a growing need to forecast more accurately in response to changing enrollment trends.

A promising future use case involves the integration of Generative AI to enhance forecasting options. For example, Generative AI could create forecast options based on a PI's portfolio, route these options to the PI for thoughts and approval, and subsequently initiate applicable business process options in Workday Financials. An illustrative scenario might involve a forecast indicating that a post-doc cannot be paid 100% of their salary; the PI could agree to reduce hours by 50%, and Generative AI could then automate the costing allocation change for this reduction. This integration of AI would not only streamline processes but also enhance decision-making and operational efficiency.



Conclusion

WSU's journey with the Grants Adaptive forecasting tool has been marked by significant positive outcomes, reinforcing the value and success of the partnership. This solution is an industry-leading example of leveraging Workday Adaptive Planning to enhance and maximize an institution's investment in Workday Grants Management for which WSU was recognized as a Finalist for Workday's Powering Innovation Customer Award in 2024. It also exemplifies how Adaptive Planning can continue to bring value to clients post-implementation. The forecasting solution is now available to over 900 PIs and research administrators across campus and the WSU team is now focused on increasing user adoption across campus and identifying additional enhancements that could be made to the tool. The deployment of the tool has been a great accomplishment for WSU, providing new forecasting capabilities to a broad audience that previously lacked such tools.

For more information, please contact us.

Nigel Chong-You

Senior Manager, Higher Education
Deloitte Consulting LLP
nchongyou@deloitte.com

Ryan Loftus

Manager, Higher Education
Deloitte Consulting LLP
rloftus@deloitte.com

Gerik Kimble

Executive Director of Business
System Operations and
Process Improvement
Washington State University
gerik_kimble@wsu.edu

Christine Galbreath

Grants Workstream Lead
Washington State University
christine.galbreath@wsu.edu



For more information, visit www.deloitte.com/highereducation or email highereducation@deloitte.com.

Deloitte.

This document contains general information only and Deloitte is not, by means of this document, rendering accounting, business, financial, investment, legal, tax, or other professional advice or services. This document is not a substitute for such professional advice or services, nor should it be used as a basis for any decision or action that may affect your business. Before making any decision or taking any action that may affect your business, you should consult a qualified professional advisor.

Deloitte shall not be responsible for any loss sustained by any person who relies on this document.

As used in this document, "Deloitte Risk and Financial Advisory" means Deloitte & Touche LLP, which provides audit and risk advisory services; Deloitte Financial Advisory Services LLP, which provides forensic, dispute, and other consulting services; and its affiliate, Deloitte Transactions and Business Analytics LLP, which provides a wide range of advisory and analytics services. These entities are separate subsidiaries of Deloitte LLP. Please see www.deloitte.com/us/about for a detailed description of our legal structure. Certain services may not be available to attest clients under the rules and regulations of public accounting.