Northwestern University’s office of human resources has found a way to do what every HR organization in a university setting strives to do: contribute in a meaningful way to the institution’s academic mission. As part of a focused effort to introduce more innovative university-wide talent strategies, human resources created a robust faculty database designed to promote collaboration, boost productivity and attract new talent. Dubbed Northwestern Scholars, the application has not only contributed directly to the university’s research, teaching and clinical missions, but also has contributed to HR management on campus and beyond.

What It Is
Northwestern Scholars is a searchable online database of faculty expertise across all disciplines at Northwestern University. The workforce application, developed and maintained by the office of human resources in collaboration with the office of the provost, contains profiles of faculty members comprised of publications and other scholarly accomplishments, grants and other user-input data. These data are used to visualize research networks and collaborations both within Northwestern and across a global community of institutions using such tools.

Northwestern Scholars unites information about the Northwestern faculty workforce in a unique and useful way. The tool enables the university to help new faculty and students find faculty members as research advisors, mentors, colleagues or collaborators at Northwestern and elsewhere and showcases the institution for the purpose of recruiting new faculty and graduate students. The database helps university leaders gain more insight on productivity by providing metrics on publications, grants and collaborations for individual faculty, departments and the university as a whole. It also helps identify faculty who need mentoring to improve levels of collaboration and productivity; assists faculty in finding funding opportunities; extracts collaboration data for proposals and faculty annual reports; and profiles and displays core facilities data across Northwestern, integrating these data with publications and grants.

“Our university strategic goals are predicated upon the ability for faculty, students and staff to collaborate in a multidisciplinary way,” says Pam Beemer, associate vice president for human resources at Northwestern. “We knew that traditional networking alone would not be sufficient to help us meet this goal. Rather, we needed to give our faculty a way to showcase their talent and connect with others in new and different ways, and the Northwestern Scholars database allows them to do just that.”

How It Works
Northwestern Scholars is unique in its scope and technical underpinnings. In terms of scope, the application extends across all fields of study in the university. “Typically, tools such as this are focused in the areas of STEM and medicine,” says Beemer. “However, we think it is critical to include the entire university, as innovations are increasingly born of collaboration across all disciplines. Northwestern Scholars has the ability to capture far more than published books and articles, including accomplishments as diverse as music and theatrical performances and journalistic publications.”

The technical underpinnings were conceived by Northwestern and developed in partnership with an outside vendor. While some of the functionality is driven by vendor products, there are two notable Northwestern innovations in the tool. First is the use of “fingerprinting,” using semantic web ontology, in new research areas outside of the STEM fields. This allows new search capabilities based on the unique taxonomies of the various fields of study. The second innovation is the “profile enhancer,” which allows the inclusion of research...
interests, educational and clinical background, awards, honors, committee work, previous employment and many other activities of faculty.

“In many cases, we were able to automatically populate these data elements from feeds from the various schools at Northwestern,” says Beemer. “In other cases, we used digital copies of faculty CVs and copied and pasted the data into the profile enhancer. By using existing university data, we were able to create a robust tool with virtually no time burden on our faculty.”

The application integrates information from Northwestern enterprise systems and other databases, including appointment data from the institution’s Faculty and Staff Information System; grant data from the office for research and affiliate hospital systems; patent data from the office for innovation; research statements, education and publications from a variety of local school databases; and more.

Northwestern Scholars initially profiled 3,000 faculty members, including all tenure-track faculty; paid emeritus faculty; 75 percent time or greater research and clinical faculty; continuing lecturers in arts and sciences; faculty of Northwestern University in Qatar; academic full-time faculty at or above assistant professor rank; library and contributed services faculty receiving grants or with publications; 75 percent time or greater instructors; and institutional collaborators such as scientists at the Chicago Botanic Garden and the Solar Fuels Institute (SOFI) (in fact, Northwestern is helping SOFI develop a similar application for solar fuel researchers globally). Profiles are matched to the vendor’s grant funding application, allowing faculty members to receive e-mail notifications of grant opportunities from more than 4,000 government and private funding sources.

How It’s Been Received
One of the best leading indicators of an innovation’s value is that it is being used frequently, repeatedly and intensively. And Northwestern Scholars is. The database was made available to faculty in February 2012. In just a year and a half, the site has had more than 200,000 visits. There have been more than 42,000 repeat users, with a core group of around 2,000 individuals who use the site on a regular basis. Among the application’s regular users are executives in Northwestern’s office of alumni relations and development, who have been using the database to match funding opportunities they receive from the private sector and foundations to faculty members, and the various Northwestern schools, which are downloading data for their websites’ faculty profiles and annual activity reports.

“Our faculty will not spend their time on an application that does not advance their research, teaching and clinical agendas,” says Beemer. “We are delighted at the indicators of success at this stage of implementation. Data show us that our faculty members, and many administrators and executives, find the database to be truly useful and helpful.”

In addition to providing value to faculty and contributing to the academic mission of the university, the application has also served to advance the institution’s HR management practices. “The database serves as a powerful and unique recruiting tool, provides a wealth of objective data for use in individual development planning and performance feedback, gives our administration new tools with which to analyze human capital within the university, and brings faculty members to self-service,” says Beemer.

Provost-Approved
One of Northwestern Provost Daniel Linzer’s highest priorities is to help the institution’s faculty sustain high levels of productivity and impact. And he’s certain Northwestern Scholars is helping to meet that goal. “Northwestern Scholars exemplifies the power of connection and innovation in higher education,” says Linzer. “This tool provides a comprehensive picture of scholarly activity on our campuses (and beyond), facilitates multidisciplinary collaboration among faculty and students, sparks research innovation and impact, and strengthens mentorship. I believe the Scholars database will have a profound long-term impact on the creativity and productivity of our faculty and students.”

For its Northwestern Scholars database, Northwestern University’s Faculty and Staff Information System (FASIS) team received CUPA-HR’s 2013 HR Innovation Award. Thanks to the generous support of PeopleAdmin, CUPA-HR is pleased to offer a $3,000 contribution to Northwestern’s endowment or a scholarship of the team’s choice. The team will be recognized at CUPA-HR’s annual conference in Las Vegas this fall.