

*The SMR Knowledge Services e-Profile*  
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## **Peter R. Young at the National Agricultural Library: Managing Knowledge Services at the Macro Level**



A satisfying way of thinking about knowledge services is to link the information/knowledge/learning management process to the end results that have been sought – and delivered – for decades. The connection often comes up in conversations among knowledge services professionals, and it is not uncommon to hear a knowledge services manager remark that the knowledge development/knowledge sharing process is “what we’ve been doing all along – we just didn’t put a name to it.” Peter Young at the U.S. National Agricultural Library doesn’t go quite that far when he speaks about knowledge services as a management methodology, but he is certainly comfortable describing the processes and results that take place at his organization as having been in place “for a long time.” The NAL’s interactions with its clients are impressive to say the least; some 86 million direct customer service transactions were delivered in 2005. The fact that these transactions build on a framework that has been in place since 1862, one that embraces some 110,000 people, in 29 different agencies with six different mission areas, makes even the evaluative term “impressive” seem a little weak.

That is not a problem for Peter Young, who sees the entire knowledge development/knowledge sharing process, what we now simply refer to as “KD/KS,” as part of what the NAL was created to do.

“The National Agricultural Library is a knowledge-based organization,” Young says, “and I use that description in a foundational sense. It goes back to the founding of the U.S. Department of Agriculture under President Lincoln. It is our responsibility to service this organization, and with respect to knowledge services, it’s certainly what we have been doing over the past decade, taking the library to the knowledge workers, rather than waiting for the knowledge workers to come to us. A quick example is included in that list of annual direct customer services transactions. Of these, some 675,000 were downloaded digital articles provided directly to USDA staff. So what we have at our place is a situation in which our needs are not just the professional print materials, but now we have to look at adding digital, imaging, datasets, all the different information and knowledge elements that come into play, all of which provide the underlying basis for scientists to write their scientific articles.”

And throughout the library’s history, that remarkable level of service delivery has been matched with – and often supported by – a strong commitment to technological growth, as Young notes.

“The library has been a leader in bringing technology into the departmental mission for many years, going back to the days of Ralph Shaw, the Director at NAL from 1940 to 1954. Shaw worked with Vanover Bush in the early days of the ‘memex,’ now remembered as one of the earliest applications for the use of ‘electronic brains’ (as computers were called in those days) in information storage and retrieval. Shaw brought the Bush ‘memex’ prototype to the USDA Library in an attempt to automate the *Bibliography of Agriculture*. Throughout its history, NAL has tried to apply every successive generation of technology to the achievement and implementation of our mission. Sometimes successfully, sometimes not so, and with some mixed results, I have to say. But NAL has always strived to improve our delivery of knowledge services to our customers.”

So knowledge services, as a specific management framework, is fundamental to service delivery at the National Agricultural Library (one of the country's four national libraries, incidentally, the others being the Library of Congress, the National Library of Medicine, and the National Library of Education). Is it recognized as such?

"That's not an easy question to answer," Young replies. "The National Agricultural Library is preeminently an operation of the Federal government, and we take direction from the policy and policy documents established by the Federal government. As a unit of the U.S. Department of Agriculture, the document that drives our operation is based on the President's Management Agenda (<http://www.whitehouse.gov/omb/budget/fy2002/mgmt.pdf>). None of the stated agenda items uses the word 'knowledge' or refers to the creation or sharing of knowledge in any way."

The President's Management Agenda was announced in the summer of 2001, with the agenda described as "an aggressive strategy for improving the management of the Federal government," with the purpose of focusing on "five areas of management weakness across the government where improvements and the most progress can be made." The focus areas are the strategic management of human capital, competitive sourcing, improved financial performance, expanded electronic government, and budget and performance integration. All are, of course, knowledge driven, but as Young points out, the role of knowledge and knowledge services delivery is not made explicit in the document.

That said, knowledge management and knowledge services delivery are necessarily a vital element in the successful mission-specific management of all Federal agencies, and they will continue to be so. Even if the phraseology is not specific, the processes and products delivered must (or should) be knowledge-based. And at the National Agricultural Library, knowledge-based service delivery is an institutional asset that Young is obviously pleased to describe.

"NAL houses one of the world's largest and most accessible agricultural information collections," he says, with obvious pleasure in his voice. "The library serves as the nexus for a national network of state land-grant and U.S. Department of Agriculture field libraries. In some respects, when you're talking about the transfer of information and the work knowledge services professionals do, you could even use the image of the back and forth transfer of cash in the banking industry. It's the knowledge services construct that keeps that knowledge nexus functioning, and providing the services that society requires."

Indeed, when Young describes the level of KD/KS that takes place regularly through NAL, it is clear that knowledge development/knowledge sharing is simply built in to the library's work. In fact, as he is quick to note, attempting to put a "tag" on how knowledge management and knowledge services are defined at NAL would be a very difficult task indeed.

"As in all large organizations," he says, "if you asked for definitions, you would probably get a different response from each person you asked. On the other hand, knowledge management and knowledge services are so ingrained in what we do that we could almost say that definitions are not really needed. But whether verbalized or not, what is so exciting about the knowledge services definition we're seeing used – the convergence of information management, knowledge management, and strategic learning – is that we're describing a non-linear paradigm. It's an organic evolving model that never sets up just one way of looking at a query or a search but uses any arrangement of those elements, and we take whatever arrangement that is required for the customer, whether that customer is a Nobel Laureate scientist or a student with a science fair project."

Yet Young is aware that these ideas are being thought about among many other leaders in the research libraries community.

"NAL is an active participant in the Association of Research Libraries," he says, "and these same responses might be conveyed to you by the leaders of any other ARL library. All of us have the same sense of what knowledge development/knowledge sharing is all about, and we're all discovering – if we haven't already discovered – that any research organization, any library, that isn't involved in knowledge services, as we define it here, is really only an information or artifact warehouse or book museum. Society today will not permit the medieval monastic type of 'library,' not if the library is to have any active role to play in society. Libraries must be part of the decision-making process, dealing with the creation of new knowledge and the re-use of already established knowledge to create new knowledge."

Not surprisingly, there are examples galore at NAL. One of the most notable examples has to do with the partnerships that the library has established, formal as well as informal. The formal ones are striking, and are listed right up there on the NAL website (<http://www.nalusda.gov/about/partnerships.shtml>). These partnerships clearly acknowledge the place of knowledge development and knowledge sharing at NAL – it's critical to the success of the library's mission.

Yet there is much, much more, and Young is emphatic that the partnering goes well beyond traditional institutional partnerships. He and his staff have moved into the very realm of knowledge/information/learning service delivery that characterizes all successful interactions. As he puts it, “We’re attempting to cover a full range of needs. We’re not doing it alone, but with land grant institutions across the Nation, through a variety of important partnerships, through AgNIC (the Agriculture Network Information Center), of course, but also through universities, not-for-profit organizations, and, yes, with international organizations. We’re not seeking to work so much within a *national* framework as in a *human* framework.”

“At NAL,” Young continues, “our knowledge services framework, our vision for the future is to be an active partner with all levels of society, with scientists, with students, with average people as they discover that agriculture is really connected to health, the health of the individual, of the society, of the planet. In the four and a half years I’ve been affiliated with the NAL, if I’ve learned nothing else about agriculture, I’ve learned that it is more than simply increasing the yield of farming, food, and fiber. Rather, agriculture in the 21<sup>st</sup> century is really about teaching us about how we can be healthy, and how we can remediate the damage that’s been done to our environment by our industrial society over the past several centuries.”

As for how that vision is to be achieved, Young is very specific.

“We must measure,” he says. “In order to characterize our success – and linking directly to our knowledge services focus – we must measure. We are now engaged in an effort that not only measures the services we offer, but the demand for services. With a recent electronic survey NAL conducted of food and agriculture use, we had more than 6,000 responses, more responses than in any other survey done by the organization doing the study for us. That is a remarkable number of responses, and it tells us that our users understand what we’re trying to do. They understand that what we’re trying to measure is not just about NAL and the services the library provides, but about who is using information about food and agriculture. It’s all part of achieving our vision to enhance the quality of life. To get there we need to evolve, to create the market and be in a position to transform the concept of agriculture and – in our work – the way we make use of the KD/KS process.”

Indeed, other KD/KS examples at NAL relate to activities within the organization, and Young is very proud of the way the NAL responds to changing requirements in the knowledge market.

“I’ve referred to the fact that NAL is knowledge-friendly organization,” he said, “even if we don’t necessarily characterize ourselves as such. One of the things we are working with now is a workforce planning process, seeking to identify what skills we have at present as well as identifying the skills we need in the future, and to fill the gaps. We have a sort of a staff tradition at NAL, a sort of ‘grow-your-own’ professional development system, in which an employee can start out at a fairly basic support level and through mentoring and through different programs that have evolved over the years, that employee can grow on the job, be trained and advance in his or her professional work.”

“What we have with the staff at NAL,” Young continues, “is something I refer to as a ‘deep culture,’ a staff culture that has grown up in the organization, dating back decades, not just years. It’s a culture with a highly defined sense of expertise and teamwork/collaboration. There are few things that the staff can’t do, and KD/KS is built in.”

Can he provide an example?

“Of course,” he says, without hesitation. “Recently, all agencies within USDA were required to standardize their Web sites, and for us, that meant that the library had to migrate some 64,000 Web pages. It took 18 months, and in the process, by internalizing the effort, staff teams at NAL were able to facilitate transference process tools unique to NAL but applicable across USDA. These were offered throughout USDA, and no one even thought of questioning the sharing of the work. There is a culture of sharing, a culture of seeking innovation ideas and then sharing the products that result.”

Clearly KD/KS is taken very seriously at NAL, and practiced very well. Young just laughs at the assertion, quickly pulling up another example, this one obviously one of his favorites.

“Think about this. A few years ago, we decided to offer staff the opportunity – for a small cash incentive – to come up with innovations that might be useful in improving workflow, or for moving some of our processes along a little faster. Within seven days we had 27 proposals, many of which have since been incorporated into our implementation processes. And one in particular has led to an even greater KD/KS impact, for it suggested that NAL develop a digital repository for USDA-authorized scientific articles, following the NIH open access/public access model. And why not? We’ve looked at it, put it together, and now we are starting an internal NAL initiative involving primary source for scientific articles published at public expense using

research paid for by Department of Agriculture scientists. This is just the kind of thing we need to be doing to achieve our vision, and it came from in-house, with a staff determined to not only develop knowledge products and services, but to share them as well.”

These are exciting times at the National Agricultural Library, and it is clear that Peter Young is enjoying his work, enjoying leading an organization that is so responsive to its customers’ needs and interests. But there must be things he worries about, and Young has a ready answer when he is asked about the challenges he and his staff have to deal with.

“The easy answer,” he says, “is that most people expect our challenge to be money. Of course, but we are not challenged just in the monetary sense. That’s a given in many service organizations, but that’s not what I see as our primary challenge. What we need is support. We need the support of the government, of universities, of all Americans so that we can provide what our society needs for an improved life, for getting the most out of what the earth and science combined have to offer. That’s what we’re here to do, and we want to be able to do that for all the people we interact with. We want to help all citizens have an improved life. And we need support to do it.”

[Note: Opinions expressed by Mr. Young are his own and do not represent the opinions of the U.S. Federal Government or the U.S. Department of Agriculture.]

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