

Collaborating with Customers
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Increasingly, research organizations are evaluating the impact of their products and results as a means of demonstrating return on investment (ROI) and proving value. At the National Institute of Standards and Technology (NIST), the Information Services Division (ISD)'s Lab Liaisons are collaborating with customers in innovative ways to perform these types of analyses.

The ISD Lab Liaison Program was created to establish ongoing relationships between the Information Services Division (ISD) and the extended NIST community of researchers, program managers and administrators. Through these relationships, ISD can provide enhanced service and address targeted customer needs. Lab Liaisons collaborate with their customers in a variety of ways including:

- Performing in-depth information research or comprehensive literature searches
- Conducting publication, citation, and impact analyses
- Supporting the full cycle of the publication and research dissemination process
- Providing knowledge management expertise
- Developing the NIST Research Library collections.

Over the last year, the Lab Liaisons have joined forces with NIST research staff to perform several types of analyses. These included the analysis of publications patterns, an assessment of NIST's investment into specific strategic research areas, and an analysis of NIST's impact on the surrounding local research community. The Lab Liaisons also partner with customers in ways beyond these types of analyses. For example, one of the Lab Liaisons is collaborating with a team which is designing an enterprise-wide technology platform to help NIST better manage the editorial and publishing activities of the research staff.

Two separate customer segments were concerned about increasing the visibility of their publications as a means of expanding the impact of their results. Using commonly existing information tools and databases, Lab Liaisons evaluated the projected impact of NIST research products within their respective communities. The results of these analyses were provided to upper-level NIST technical management and provided the basis for creating a distinct and overarching publication strategy for each of the two Operating Units.

Lab Liaisons also joined forces with NIST researchers to measure the extent of NIST-wide investment made in certain strategic research areas. One measure for understanding this investment is to calculate the number of publications created in these areas during a range in time. ISD's analysts used an internal publications database to identify publications covering specific strategic technology areas. This was an innovative use for this database content. The Lab Liaisons consulted with NIST scientists who specialize in these research areas and developed a set of more than 90 individual search terms to

pinpoint publications related to these research areas. The data collected then allowed the Lab Liaisons to determine the proportion of NIST's total publication portfolio that was devoted to these research areas. The analysis summarized the levels of investment for each individual operating unit within NIST, comparing these trends over time from 1999 through 2007. Lab Liaisons packaged these results in a report and provided them to NIST upper-level technical management.

Assessing the strength of relationships between NIST and the local community is of great importance to the agency. These kinds of requests mostly come from upper-level technical management and often require quick turn-around. One such request involved ISD's Lab Liaisons evaluating the number of papers NIST had co-authored with researchers in Maryland agencies, organizations, and academic institutions. Bibliographic information, such as title, abstract, keywords, and author affiliation were examined to determine corresponding industry sector. A set of 6,780 NIST papers spanning the years 2002-2006, were retrieved to conduct this analysis. The final product consisted of a dataset detailing the Maryland organizations NIST has co-authored with and the number of times these collaborations have taken place. In addition, graphics were created to illustrate the specific industry sector breakdowns

Implementing technology is another area where collaboration is essential. NIST has an editorial review process through which all official and quasi-official technical material must be reviewed before being released to the public. The process, which includes a lab-level review and a NIST-level review, is being automated. The lab-level review and the NIST-level review are being developed by two different IT groups, but will be integrated when completed. A Lab Liaison with knowledge management expertise is collaborating with the two technical groups to ensure that business requirements and processes are clearly understood and being implemented appropriately. In addition, the Lab Liaison representative is participating in training for the application.

At NIST, ISD and the Lab Liaison program are collaborating with customers in a variety of ways. Increasingly, these collaborations take advantage of ISD's expertise, putting the Lab Liaisons on an equal footing with the NIST Research staff and demonstrating the impact and value of both to the organization.