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information outlook

THE MAGAZINE OF THE SPECIAL LIBRARIES ASSOCIATION





information outlook

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Communicating Your Library's Mission

A paper about bibliometrics and a new column about careers complement a variety of perspectives on developing a mission statement and sharing it with stakeholders.

BY STUART HALES

Does your library or information center have a mission, and do you know what it is? Could you recite it if your boss called you into his or her office? How did you develop it, and do your work and attitude reflect it? And do you channel Jurassic Park when trying to communicate it to stakeholders?

These are just some of the questions raised and addressed in this issue of *Information Outlook*, which contains perspectives on library missions from librarians as well as from a marketing and communications specialist, a "thrivability" consultant, and a pastor. Be sure to read Heather Kotula's argument for incorporating return on investment into your library's mission statement and Brian McCann's analysis of why Jurassic Park should guide your approach to communicating your mission.

This issue also features an interview with SLA members Susan Makar and Amy Trost, the authors of the best contributed paper presented at the SLA 2018 Annual Conference. If you thought bibliometrics was just for counting citations and calculating the impact of research, read their paper and learn how they used bibliometrics to provide quantitative analysis.

The content in this issue reflects SLA 2018 in another way—a new column, "Info Careers," in which SLA members will share their career lessons and advice. This new column resulted from a session at SLA 2018 hosted by the Information Outlook Advisory Council (IOAC) titled "Ask Us Anything: Contributing to Your Professional Outlook." Magazine, Information Session attendees shared their concerns and suggestions with IOAC members, and one of the latter was a desire for a column devoted to career advice and experiences. Tom Nielsen kicks off this column with a reflection on career success and an insight into defining success in ways that reflect your unique skills and circumstances.

What other insights can you glean from this issue? Consider the following:

"Like the organizations they serve, many libraries and information centers have mission statements, But what if they had mission *questions* instead of mission statements? How much more engaging and inviting would this be than the typical bland pronouncements about 'providing resources and services'?"

—Michelle Holliday, "Using the Power of Questions" "Have you ever tried to tell a great joke, but ruined it with bad delivery? When you're talking about the value and benefits that your library or information center delivers, good delivery is critical."

---Kathy Dempsey, "Five Tips to Help You Communicate Your Mission"

"... A typical researcher will spend a month of 8-hour days each year just reading articles—and this does *not* include time spent searching for said articles and other information. One can easily make the argument that this is not productive time. If, instead, a researcher asks a librarian for assistance finding information, that time becomes productive for the librarian—this is the librarian's job, after all—and for the researcher as well, because he/she can use that time on other tasks."

—Heather Kotula, "Incorporating Metrics into Your Mission"

"What we need to remember in communicating with our clients and patrons is that we are not salesmen roaming neighborhoods, hoping to convince people they need us. We already know they need us, and we know there are ways we can help them. Our task is to find out how we can help them and show it to them."

> —Brian McCann, "What Jurassic Park Can Teach Librarians about Communicating Their Mission"

"While most people would probably acknowledge that their physical appearance is something they actively work on, few would say the same about their online image. But while maintaining your online image may not be a priority for you, it can quickly become one when searching for a new professional opportunity."

—Sophia and Senovia Guevara, "Improving Your Professional "Image Online"

To learn more about communicating your library's mission, using bibliometrics, improving your online image, and navigating your career, read this issue of *Information Outlook*.

STUART HALES is content director at SLA and editor of *Information Outlook*. He can be reached at shales@sla.org.





ELECTIONS • SLA 2020 • LEADERSHIP SYMPOSIUM

SLA Members Choose Tara Murray as 2020 President

Tara Murray, a 20-year member of SLA who has been active at all levels of the association and has worked in public, private, corporate, and academic libraries, will serve as president of SLA in 2020.



Tara was elected by SLA members in an online vote that opened on September 5 and concluded on September 19. She will serve a one-year term as president-elect in 2019, then serve as president and past president in 2020 and 2021, respectively.

Tara is the librarian for Germanic and Slavic languages and literatures at Penn State University and also serves on the editorial board of the *Journal of Library Administration*. Before coming to Penn State, she worked at the American Philatelic Research Library in Bellefonte, Pennsylvania.

Since joining SLA in 1998, Tara has served the association in several capacities. She was president of the SLA Central Pennsylvania Chapter in 2004-2005 and chair of the SLA Social Science Division in 2011 and again in 2016-2017. She also served on the SLA Board of Directors in 2013-2015. She was named a Fellow of SLA in 2017 in recognition of her service to the association and the information profession.

In addition to Tara, three other SLA members were elected to board posi-

tions that will begin in 2019:

- Bill Noorlander, BST America (New York): Treasurer
- Robin Dodge, Fashion Institute of Design & Merchandising (Los Angeles): Chapter Cabinet Chairelect
- Jill Konieczko, Zimmerman Associates (Fairfax, Virginia): Division Cabinet Chair-elect

The new board members will replace the following current members who are rotating off the board at the end of this year: Dee Magnoni (past president), Nick Collison (treasurer), Mary Talley (past chapter cabinet chair), and Tom Nielsen (past division cabinet chair).

SLA to Hold 2020 Annual Conference in Charlotte

On October 18, SLA President Roberto Sarmiento informed SLA members that the association will hold its 2020 Annual Conference in Charlotte, North Carolina.

The announcement marked the latest development with respect to Charlotte, which SLA had selected in 2015 to host the association's 2018 Annual Conference. Soon afterward, the SLA Board of Directors voted to relocate SLA 2018 in response to the passage of House Bill 2 (HB2), the so-called "bathroom bill," by the North Carolina General Assembly. HB2 defined "male or female" for public discrimination purposes as the gender stated on a person's birth certificate; it was enacted in retaliation for Charlotte expanding its anti-discrimination laws to allow individuals to use bathrooms according to the sexual orientation with which they identify.

The SLA Board of Directors concluded that HB2 violated SLA's antiharassment policy and voted in April 2016 to pull out of Charlotte and find another location (SLA 2018 ultimately was held in Baltimore). In March 2017, the North Carolina General Assembly

repealed HB2 and replaced it with a new law, House Bill 142 (HB142), that eliminated the requirement that people using multiple-occupancy restrooms in public buildings must use restrooms that match their birth certificate. With the repeal of HB2, SLA was open to re-evaluating Charlotte as a potential conference site.

In his message to SLA members, Roberto emphasized that although SLA 2020 will be first and foremost a professional development and networking event, it will also be an opportunity to explore questions around diversity and inclusion and participate in activities that support diversity initiatives.

"There is no doubt that SLA annual conferences are occasions for professional development and networking," Roberto stated. "In addition, our annual event is a time for celebrating—celebrating our profession, our association, our colleagues, and ourselves. SLA 2020 will be no different, as we continue to celebrate and fight for the values of equal access and openness that we hold dear."

More information about SLA 2020 is available on sla.org at https://connect.sla.org/ac2020/home and at https://connect.sla.org/ac2020/new-item2.

Leadership Symposium Set for January in New Orleans

SLA has scheduled its 2019 SLA Leadership Symposium for January 20-22 at the New Orleans Downtown Marriott at the Convention Center.

The agenda for the 2019 symposium will be similar to that of the 2018 symposium:

- SLA committee and council meetings will be held Sunday, January 20, followed by a welcome reception in the evening.
- Monday, January 21, will feature leadership-focused professional development to complement last year's intensive learning experience.

NEW WEBINARS

 Tuesday, January 22, will offer an engaging schedule of volunteer and unit leader training for SLA volunteers.

The Monday session will be facilitated by Jon Hockman, principal at McKinley Advisors. He has worked with more than 100 associations in the areas of leadership development, change management, and strategic planning.

New Webinars Explore Departmental and Project Management

SLA is offering new webinars to educate information professionals who are advancing to management positions and being tasked with managing and delivering projects.

A two-part series, "Keys to Navigating Management," is designed to provide a comprehensive understanding of the management skills required to excel within a management position and the overall organization. The series covers topics such as management 101, finance and budgeting, and how to be an effective supervisor. It is led by management experts and a past SLA president, Pam Rollo, a director in Standard & Poors' ratings unit and a visiting professor at Pratt Institute's School of Information and Library Science.

three-part series, "Project Management for Today's Information Professional," shares real-world examples of how to successfully complete data management and technologybased projects on time and within budget while meeting strategic and organizational goals. The series provides a broad overview of project management, then drills down into specific concepts, tools, and techniques. Presenters include Lisa Chow, a 2011 SLA Rising Star and certified project management professional (PMP), and a project director for an arts and education performance society. **SLA**

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Five Tactics to Help You Communicate Your Mission

THE EDITOR OF MARKETING LIBRARY SERVICES SHARES FIVE TIPS ON COMMUNICATING YOUR LIBRARY'S MISSION AND EMPHASIZES THE NEED TO BE PREPARED TO SHARE IT ON A MOMENT'S NOTICE.

BY KATHY DEMPSEY, BA

elping your colleagues, clients, and administrators understand your library's mission is critical to keeping it funded and yourself employed. Many people still think of libraries as places where they studied in high school or college; they don't understand why they might need libraries after graduation. It would be logical, then, for many people in your organization to be utterly unaware of what your information center can do for them.

Of course, the obvious answer is "provide information." Therein lies the problem: Most people don't think they need help acquiring information. As long as they have Internet access and Google, they feel can find anything they could possibly want or need—without your help. Since that's not really the case, part of communicating your mission has to be explaining why libraries

still matter and why they're so much more valuable than Internet search engines.

Everyone reading this article can probably think of at least three reasons why information professionals are better at finding information than Google. But how many of you could articulate them clearly, in less than a minute? If the person who signs your paycheck asked you to explain why your job should still exist, could you do it? And what, exactly, would you say?

Guidelines for Successful Communication

When you need to communicate your mission and your value, it's imperative you do it well. While each library, knowledge center, or information center is unique, there are general guidelines you can follow that will make your com-

munications more clear and effective. The five tactics discussed below will enable you to do that, whether in a report or brochure, as part of an evaluation, or during a formal or informal conversation.

It's important to note that you need all five tactics, working in tandem, to achieve optimum outcomes. Let me briefly explain each one to get you started.

1. Align your message with your target audience. SLA preaches the importance of libraries aligning with their parent organizations, so hopefully this is second nature by now. What it means for communications is showing that you share and support the priorities of your target audiences.

For example, when conversing with people in the finance department, talk about how your work affects the bot-



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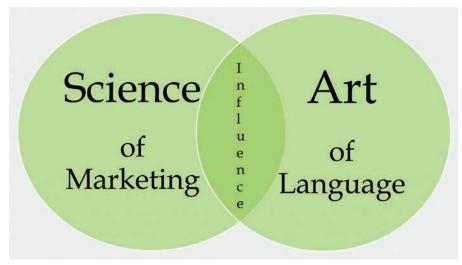
tom line: "Our research helped secure a patent for a product that will increase corporate earnings." However, if you're talking with someone in sales, say something about how your work supports their efforts: "Our research helped us obtain a patent before our competitors did, giving you the first chance to sell a product that the market has been waiting for." Your mission didn't change, but the slant of your message did.

2. Use powerful words, without library lingo. This tactic should apply to all of your external communications. If you want others to understand you, use their language, not yours. It's important to understand that many of the words you use every day are actually library jargon—think circulation (books and blood), reference (answers to questions and end-of-paper citations), and resources (databases and water). To avoid confusing your audience, never say, "Our mission is to circulate as many resources as possible."

Communicating successfully will necessitate learning the language of your target audience. Luckily for you, you're the keeper of your audiences' favorite resources. So, before you talk to the finance manager, leaf through some journals that financial professionals read. When preparing for a meeting with physicians, look at a medical database. When you're researching any field or profession, take note of its language and remind yourself to use it when creating your deliverables.

Here's a tip: Write out what you'd normally say, then go over the message and replace all library-specific terms with ones that your target audience uses. Consider creating a spreadsheet of the terms you delete and the terms you substitute for them for each different client group, so you can create messages more quickly and easily going forward.

3. Focus on benefits, not products. Much like the way we use the jargon of our profession, we also default to using product names of tools and resources. Many of these names, sad to say, don't



Combining marketing tenets with carefully chosen words allows you to influence your listeners.

offer any clue as to their content. For instance, *LexisNexis* doesn't tell anyone that it offers legal research or risk assessment information, and *ERIC* just sounds like a guy's name, right? And whatintheheck is an *EBSCO*?

Clearly, you shouldn't use many vendor or database names when trying to communicate the value of your work. And that's OK, because one of the main tenets of marketing is that you shouldn't talk about products anyway. What your audiences care most about are *results*. What can your library or info center do for them? What are the benefits of using it? Your messaging should answer the oft-unspoken question known as WIIFM: What's in It for Me?

So, instead of telling your boss's boss, "I used LexisNexis to find helpful data for the sales department," say, "My report enabled the sales department to close a deal." (This is not bragging; it's building understanding.) Like it or not, you must realize that you're the only one who cares about which product does what. Everyone else only cares about the benefits they reap in the end.

4. Be articulate, brief, clear, decisive, and enthusiastic (A, B, C, D, and E). Once you've created a message that (1) aligns with your listeners' needs and knowledge level, (2) uses language they understand, and (3) makes the benefits obvious to them, you still need to actu-

ally deliver that message. When you do, you'll need to sound convincing, especially if you're speaking face to face. Here's a little alphabet-play to help you.

Obviously, being **A**rticulate is key. You need to sound smart and savvy.

Brevity is always appreciated, especially by busy management types (as if you're not busy, too). Don't worry about not giving them every detail—if your brief message piques their interest, they'll ask for more, and then you'll have their attention for a longer conversation.

Clarity is vital in all communications, especially when you're talking about your mission and your worth to the organization. One way to ensure you're being clear is to test your message on someone else. As professional editors understand, you know exactly what you meant to say, so that's how you'll read your own message. Your brain fills in most of what might be missing, so the errors don't jump out at you.

It's ideal, but not always possible, to test your message on a member of your target audience. Realistically, however, anyone who's not you is more qualified than you are to assess the clarity and tone of your message. Make it a point to ask someone else to read and react to an important statement before you finalize it.

The last two words, **D**ecisive and **E**nthusiastic, go hand-in-hand. In most

situations, you'll want to come across as decisive, confident, and sure of what you're saying. But you don't want to seem pushy or boastful, so temper your confidence with enthusiasm. Try to add



Aligning your messages with your target audience enables you to reach its members more effectively.

that touch of excitement to your voice to convey that you're passionate as well as knowledgeable. Of course, this tactic doesn't come naturally to most people, so

5. Prepare and practice so you can speak with confidence. Now that you've come this far, don't let shaky delivery ruin your opportunity to make an important point. It's going to sound odd when I urge you to stand in front of a mirror and say your message to yourself, aloud, repeatedly. But hear me out.

Have you ever tried to tell a great joke, but ruined it with bad delivery? When you're talking about the value and benefits that your library or infor-

mation center delivers, good delivery is critical. You need to enunciate, to speak slowly enough to be understood without sounding fake and rehearsed. Performers and politicians do this when working on lines, stump speeches, and soundbites. Practicing your delivery allows you to make your point with confidence and clarity when you finally get to deliver your message face to face.

Practice is vital, so make writing messages and practicing them aloud part of regular staff activities or meetings. Make videos of your practice runs and watch yourself to see how you come across. Try not to focus on your appearance—instead, concentrate on your message and your speaking voice, volume, and tone.

Preparation Is Key

Considering all of the time and effort you and your colleagues spend to develop your library's mission statement, tagline, brand, and/or value statement, it's also worth spending a little time to make sure your external messaging conveys it well. To ensure everyone understands your place within the larger organization, take some time to thoughtfully craft a few messages for your top target audiences. Be sure to customize your message for different target markets. Write a main message, then simply change some of the language to align with the interests and needs of different listeners.

Outlining a five-point strategy may seem too complex for the task at hand, but you can do this in 30 minutes or less. What's important is to be aware of each item—alignment, lingo, benefits, how you speak, and the way you come across-when you're preparing your message. Of course, you can't always obsess over every sentence, so reserve this exercise for your most vital messages: opening lines of speeches or reports, value or mission statements that will be shared across the enterprise, or soundbites that are being recorded or reported. If you can get your audience's attention by starting strong, they'll be more apt to pay attention to the rest of what you're saying.

These tactics will help you deliver effective messages in many situations, from official meetings to informal hall-way chats. The process works whether your message is delivered in print, in person, or online. The secret is preparing ahead of time. As in the classic elevator-speech scenario, you may only have one chance and one moment to make an impression on someone. If you follow this strategy, you'll be ready for any opportunity. **SLA**

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Using the Power of Questions

ASKING QUESTIONS WILL HELP YOU BETTER IDENTIFY YOUR LIBRARY'S 'STORY' AND INVITE MORE PEOPLE TO SHARE IN ITS CREATION AND UNFOLDING.

BY MICHELLE HOLLIDAY

ike the organizations they serve, many libraries and information centers have mission statements. But what if they had mission questions instead of mission statements? How much more engaging and inviting would this be than the typical bland pronouncements about "providing resources and services"?

Far more than mere statements, such mission questions could reflect underlying inquiries, such as the following:

- Why do you want to provide these resources and services to these people?
- What learning, discoveries, and milestones—in essence, what unfolding story—is to be found on that path?
- What are you wildly curious about?
- What compels you to come together

in this work because you alone can't gain enough insight into the story?

A mission question (or, more likely, a set of them) would imply that there is clear intention, but also that there is much that is unknown. Paradoxically, this is likely to be a source of strength and deep engagement. As storytelling master Michael Margolis (2014) says, "Your greatest source of untapped power is the part of your story that is unreconciled."

This aligns with my own experience. For the past 15 years, my work has often involved helping organizations craft a manifesto—a concise expression of who they are, what they want, and what has to be true if they are to get what they want. The highly participatory and inquisitive process of getting there is always vital and engaging.

Looking back, however, I've realized that the subsequent process of creat-

ing a definitive *statement* always feels noticeably less alive. Instead of excited co-creation, there is debate. People wonder whether the document truly describes everyone involved, whether they can really claim to be all that, or whether they should be so pretentious as to publicly announce their loftiest aspirations.

Libraries as Living Ecosystems

In contrast, creating a set of mission questions seems more likely to be able to encompass diverse views even as it builds unity, to demonstrate humility alongside audacity, and to invite a broad community to see themselves in the mission—to recognize that those are also *their* questions. What makes people feel really alive and connected is sharing in the inquiry together. When that process comes to a close, so does the life in their interactions.

All of this makes perfect sense within the context of what I call "thrivability," the emerging view of organizations as living ecosystems, with the accompanying intention and practice of cultivating the fertile conditions for life to thrive within and around them. When we see a library or information center as a liv-

MICHELLE HOLLIDAY is a facilitator, consultant, and speaker and the author of *The Age of Thrivability: Vital Perspectives and Practices for a Better World.* Her work centers around "thrivability," a set of beliefs, intentions, and practices based on a view of organizations as living systems. Contact her through her website, www.michelleholliday.com.



ing system, then we acknowledge that it is more than its collections, equipment, and infrastructure—it is also (perhaps most of all) its staff and users. The library's services and value are brought to life and continually co-created through the living interactions and conversations of the people involved. And, like any good conversation, this process is most potent when it is a genuinely curious, collective exploration of an unanswered question—when it is the emergent process of crafting a story together and being in shared service of its unfolding.

A friend and I recently played with the idea of mission questions during a walk through the woods. His company, Compost Montreal, has the stated aim of "eliminating the concept of waste." Each week, they pick up food scraps from houses and offices, diverting the material from landfills and converting it into useful compost. The deeper potential he senses for his company, though, is the exploration of how composting can serve as a metaphor for the transformation that people are capable of effecting, especially by coming together.

"What if we embraced the concept of rot and death ... and also renewal?" my friend wondered, with growing excitement. "What if every aspect of our business were in service of that exploration? For example, how could our hiring practices and our ways of working together serve that question? And what kinds of conversations could we engage our customers and community in?"

When I think about the most powerful companies in the world, I struggle to imagine what their questions might be, beyond those of self-interested domination and profit for its own sake. A wise acquaintance had an astute take on this. The presence of clear uncertainty about outcomes, he suggested, might possibly be a way of discerning whether a company is up to some good or not.

"If it is truly trying to solve a problem and do something that hasn't been done, great," he mused. "If not, it is highly suspect, and probably just a cover for somebody's money machine. That we don't know how it will end means that we're alive. So we should embrace the unknown and the discovery process, as that's the real interesting part, not something we should try to hide away."

Your Larger Story

For libraries, which are so often viewed from the outside as staid and static—as decidedly *non-living*—what could be more revolutionary than explicitly embracing their vitality? After all, to be alive is to be learning.

In the quest for your library's or learning center's mission questions, one starting point might be to explore together the scope of your unfolding story. According to the famous account of President John F. Kennedy's first visit to NASA headquarters in 1961, he introduced himself to a janitor who was mopping the floor and asked him what he did at NASA. "I'm helping put a man on the moon," the janitor replied.

What is your equivalent of that response? In other words, what is the larger story of what you are helping to do within your library or information center, within your host or partner institution, within your community, and/or on Earth? What niggling curiosity do you have about where your work could take you and what it could contribute? What is ripe with possibility in the emerging story of your work, and what would you love to know about how that story unfolds? What is the greatest need that your alter egos would take on, with bold ambition, if given the chance?

Against the backdrop of an expanded and inspired scope, what are the questions that matter? My favorite resource for the practice of crafting such guiding questions is an article, "The Art of Powerful Questions," by Eric E. Vogt, Juanita Brown, and David Isaacs (2003). In their article, the authors offer prompts like these:

- What question, if answered, could make the most difference to the future of your library or information center?
- What assumptions do you need to test or challenge in thinking about

- the role of libraries and information centers?
- What conversation, if begun today, could ripple out in a way that created new possibilities for the future of your host institution and beyond?

And I would add this one: What new learning is needed in these times?

Although all of this is likely to be unfamiliar territory, the potential reward is the growing capacity to co-create a future that is more compelling and more "thrivable" than any you ever imagined possible. **SLA**

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Living Your Library's Passion

FIND OUT WHAT YOUR LIBRARY TEAM IS PASSIONATE ABOUT, THEN LIVE THAT PASSION. YOUR MISSION STATEMENT WILL FOLLOW FROM IT.

BY KARL VATERS

oes your library or information center have a mission statement? If so, can you and your coworkers repeat that statement without having to look it up?

If not, that's okay. You don't need to pull everyone together in a huddle every week, like a high school football team, to get them pumped up to help people "Learn, Live and Lead" or "Foster Inspiring Environments for Today's and Tomorrow's Innovators."

If you don't even have a mission statement, that's okay, too. The people we work with don't get good or better at their tasks simply because they can recite the magic words. They'll only perform at expected or higher-than-expected levels because they're passionate about their work—whether they can put the reasons into words or not.

So, why write a mission statement at

all? When it's based on what your team is already doing and where it's going, a mission statement can do three things:

- clarify the task for new team members;
- keep current members from experiencing "mission drift"; and
- help leaders understand what ideas to say "yes" or "no" to.

Writing a mission statement should be one of the *last* things your team does, not the first. Why? Because the only successful mission statements are those that are based on what your team is already doing anyway.

For example, I'm the pastor of a church that was in crisis when I came to lead it. Instead of trying to superimpose a mission statement on them, we worked together on becoming a healthy church by doing what churches are

supposed to do: loving God and serving others.

After doing that passionately for a few years, we discovered we were better at being a training center than we were at building a large organization. So now we do that intentionally. We train people to be great leaders and send them out to other organizations (e.g., churches, schools, and businesses) and to their families to lead with passion, humility, and skill.

We know what we are good at and what we are not good at. That isn't because we wrote out a statement, but because we did what we needed to do, paid attention to the aspects of it that we did especially well, then became very purposeful about doing it better.

Mission Statements Don't Make Great Teams

In the 1990s, it seemed like every business leader was telling us that all successful companies need a mission statement. So CEOs gathered all their innovators and creatives together for vision-casting weekends to brainstorm and write an inspiring sentence or slogan.

A great deal of time, energy, and capital was expended to develop a

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Communicate your library's mission by feeling it in your heart, then living it. The statement will write itself.

motto that was supposed to turn failing companies into successful ones, and good companies into great ones. But after the vision-casting weekends were over, everything went back to business as usual.

Today, it seems as if every business, church, hospital, and college has jumped aboard the mission statement train. Even some families and individuals feel like they're missing out on something if they can't quote a personal mission statement or life goal at a moment's notice.

So, what's wrong with having a mission statement? Nothing. What's wrong—or backwards, really—is the notion that great teams or organizations flow from great mission statements. It's actually the reverse.

Very few great companies started with a mission statement. Instead, they started with a passionate idea in the heart of their founder(s).

Eventually, others got swept up in the passion. Not because of a cool slogan, but because that passion was turned into a real-world product or service that customers or clients wanted to use and employees wanted to deliver.

So, what's the passionate idea behind your library or information center? What's the service or benefit or value you want to deliver?

How to Write a Mission Statement

If your team isn't doing good work, a clever slogan or mission statement won't bond the team together or engage your customers. In fact, it's more likely to be a source of ridicule and embarrassment, especially for the person or people who wrote it.

On the other hand, if you're already doing great work without a mission statement, is such a statement really needed? Maybe not. But if you think a mission statement will help define and clarify the purpose for your team and the people you serve, try this exercise:

- 1. Using simple, clear words, describe what your team already does. Forget about being clever or having the statement rhyme or alliterate—that's usually more hassle than it's worth.
- Write something that clearly says what you do now, but also points to where you want to go. It can be as simple as "we do this and we hope to do this."
- 3. Keep doing what you've been doing, but try to do it better.

Does Your Mission Need to Be Stated?

How can your library team start a project or deliver a service without having a mission statement? That's where passion comes in. Most great ideas start in the gut, not the head. There's no fully-formed statement in the heart of most creative people—not at first, anyway. Creative people feel an irresistible urge to do something, and they pursue that urge, not knowing whether they will succeed until they do (usually after several failures along the way).

Too often, we follow this sequence of events to try to reach our goal(s) as a team: mission statement \rightarrow passion \rightarrow task \rightarrow goal. The problem is that mission statements almost never produce the necessary passion. Instead, we need to tap into our passion at the outset to start the engine toward creativity,

innovation, and accomplishment.

Goals are most often achieved when we do things in this order: passion \rightarrow task \rightarrow mission statement \rightarrow goal. In this sequence, the passion and task help to create the mission statement, making the goal much more achievable.

Mission statements aren't bad; most great organizations and teams have one. But we shouldn't write a statement or slogan until we're already doing the work that will support it. We have to do the task first.

Statements don't come first—passion does. Communicate your library's mission by feeling it in your heart, then living it. The statement will write itself. **SLA**

Incorporating Metrics into Your Mission

BY HEATHER KOTULA, MBA



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ith apologies to *Mission: Impossible:* "Your mission, should you choose to accept it, is to communicate your library's mission and value to your stakeholders." (Right—as if you have a choice to accept or decline this mission!)

The first question to ask is, What is your library's mission? This leads to some related questions: Do you have a mission? Do you even know whether you have one?

I researched library mission statements and found a wide variety, from short and concise to lengthy and detailed. Here are a few that are on the short end of the spectrum (names have been omitted to protect the innocent):

- We bring people and information together.
- To bring opportunities for knowledge, learning, and achievement to our customers and community.
- The university libraries provide quality resources and innovative services to stimulate creativity, intellectual curiosity, and to facilitate lifelong learning and research within the communities we serve.

Most of these mission statements made me want to ask, *Why? Why* bring people and information together? *Why* bring opportunities for knowledge, learning, and achievement to customers and community? *Why* stimulate creativity and intellectual curiosity? What is the purpose of doing these things? What is the benefit? What is the value?

This brings me to my second set of questions: What is your library's value to your organization? How do you determine that value? Can you connect your value to your mission statement so you can communicate it to your stakeholders?

At the SLA Route 66 Chapter's Road Trip Symposium in

September, a number of us gathered to discuss what makes special libraries special and talk about ways of improving and demonstrating our value to our organizations. Return on investment (ROI) was a recurring theme at the symposium, as it's the most-often-used metric for measuring value. To our frustration, it often fails us when we use it to assess a library's value.

In strict terms, ROI is based on money spent and money earned and is calculated after the fact. Most libraries spend money and earn very little (if any), but we know that libraries provide a lot of benefits. Because these benefits are largely intangible, however, we need to look at other ways of demonstrating value.

I suggest we use a metric called total economic impact (TEI) that was developed by Forrester Research. TEI takes into account intangible benefits and, in most cases, uses them as part of ROI calculations. With a few tweaks, TEI can be expressed roughly as follows: We will be doing ______ to make ______ better, as measured by _____, which is worth

Our keynote speaker at the Road Trip Symposium, Carol Tenopir from the School of Information Sciences at the University of Tennessee, reported that a typical researcher will spend a month of 8-hour days each year just reading articles—and this does *not* include time spent searching for said articles and other information. One can easily make the argument that this is not productive time. If, instead, a researcher asks a librarian for assistance finding information, that time becomes productive for the librarian—this is the librarian's job, after all!—and for the researcher as well, because he/she can use that time on other tasks.

How do you measure this activity and demonstrate its value? Try this TEI statement on for size: We will be searching for articles to make Dr. Researcher's time spent better, as measured by her hourly salary, which is worth \$100 per hour. So, using this approach, our example library's mission could be one (or all) of the following:

- We help our patrons find information faster so they can return to their missions.
- We leverage our resources to make others more efficient.

 We save the organization money by making others more efficient.

These are mission statements that don't prompt me to ask, Why? These are mission statements that are easy to communicate to stakeholders. They explain who is doing what for whom and why, as well as expressing the value or benefit of the activity. These are "elevator pitch" mission statements. (Next time you're in the elevator with upper management, introduce yourself and tell them your library's mission statement.)

You need to go further, though, and plan a campaign to share your mission with the organization as a whole. In other words, you need a marketing plan! Visuals are far easier to broadcast to the larger community, so how can you make your mission statement visual?

Our first example mission statement makes me think of wings on feet or a sports car, maybe even a rocket ship launching. Our second example makes me think of a fulcrum, with the librarian lifting the library's resources to support some visual interpretation of efficiency (maybe a speedometer-type gauge). Our third example expressly mentions money as well as efficiency, so we have stacks of cash and a gauge.

I found a few images in Microsoft clip art that could illustrate these statements:

Once you've developed a visual mock-up, share it with a few friends and colleagues. Keep the words to a minimum and make them a call to action, as in the following:

- Visit the Library Today
- Challenge Us to Find Something for You
- Let A Librarian Save You Time

Do your friends and colleagues get the intended message from looking at your visual? Developing a concise and clear message is hard, and it will probably take several iterations. Once you have a final version, plaster it everywhere! Find at least five different ways to share your message: send e-mail blasts, add it to your e-mail signature, hang a poster in the breakroom, give out bookmarks, and post it on your website and link to it from each stakeholder category: users, employees, donors or supporters, etc.

If you have the budget for it, order promotional giveaway items like pens or pencils, note pads, or something else people will keep and use. Once you have these in hand, give them away—they don't do you any good sitting on a shelf.

Now that you've defined your mission and communicated it, your job is almost finished. You must still answer one last question: How are you going to *measure* whether you have achieved your mission? **SLA**







What Jurassic Park Can Teach Librarians about Communicating Their Mission

BY BRIAN MCCANN, MLS



Brian McCann is the systems and knowledge management librarian at Stinson Leonard Street and has spent much of his library career promoting library resources and finding new ways to engage users and build community. When not in a library, he can be found running obstacle courses, writing novels, or watching dinosaur movies. Contact him at brian.mccann@stinson.com.

see a lot of libraries take what I call the "encyclopedia salesman approach" to communicating their mission. They knock on someone's door or send them an e-mail and say, "Hey, I've got this great resource that can be used for lots of things. Do you want it?" And the person will think about it but then say no, because the person can't think of how he or she would use an encyclopedia.

The conversation goes something like this:

Encyclopedia Salesman: Hi, would you like a world of knowledge in your hands?

Resident: Um ...

Salesman: Because I'm giving you the chance to purchase your own set of encyclopedias for a very low price.

Resident: That's great, but ...

Salesman: (holds up book) Here is volume B. Everything from bacteria to boils to Bulgaria, in one book!

Resident: But I don't need to know about bacteria or boils.

Salesman: What about Bulgaria?

Resident: Not really.

Salesman: Well, what do you need to know about that starts

with the letter B?

Resident: I don't know. Maybe Boston Red Sox scores. Salesman: Hmm. That's not in here. What about the other

letters?

Resident: I was thinking about hiking Mount Hood next year. Do you have one that can tell me where to get hiking gear

or what weather to expect?

Salesman: Well, that's not the kind of information that's in

here, actually.

Resident: (feeling a lot of pity for this salesman) What about

butterflies? They start with B.

Salesman: Really? You like butterflies?! **Resident:** (pause) They start with B.

Variations on this conversation play out with librarians more often than we'd like to admit. What we need to remember in communicating with our clients and patrons is that we are not salesmen roaming neighborhoods, hoping to convince people they need us. We already know they need us, and we know there are ways we can help them. Our task is to find out how we can help them and show it to them.

So, rather than use the encyclopedia salesman approach. imagine you are going door to door with a big toolbox, saying, "What do you have that needs fixing? Because I can help with that." Then choose the right tool and make someone's life easier.

For an example of how to use this way of thinking to reach clients, consider Dr. Wu, the genetic engineer behind the creation of the fictional Jurassic Park. The scene doesn't appear in the book or movie, but I imagine the initial conversation between Dr. Wu and billionaire John Hammond went something like this:

Wu: Hi. Would you like to change the world?

Hammond: I already do, lad. I put smiles on the faces of

children with my amusement parks.

Wu: Yes, that's great, but you could do a lot more with

genetic cloning!

Hammond: Cloning? I do amusement parks. Wu: Do you have any animals at your parks? **Hammond:** I have a preserve in Kenva.

Wu: With what kinds of animals?

Hammond: Exactly the kind you'd expect—lions, zebras,

elephants. Like that. Wu: What about dinosaurs? **Hammond:** Excuse me?

Wu: Stegosaurus, Triceratops, Tyrannosaurus Rex.

Hammond: That's not possible.

Wu: But it is. See, we have the knowledge needed to find dinosaur DNA and use it to grow new living dinosaurs. You could use our information and expertise in your current framework of parks to build a special park just for these dinosaurs.

Hammond: That sounds complicated. Wouldn't it require a lot of money?

Wu: Yes. Do you have a lot of money? **Hammond:** Why, yes. Great gobs of it.

Wu: So you're saying you could incorporate our knowledge to

grow and expand your enterprise?

Hammond: Yes! I will do it!

One of the main strengths of information professionals is our ability to show how our resources and skills can directly help people. I once used elicitation techniques to learn the favorite candy of a colleague on another floor just so I could show the value of our competitive intelligence skills. So let's replay that encyclopedia conversation, but this time let's use the Jurassic Park approach.

Salesman: If you could learn about anything in the world,

what would it be?

Resident: I'm not interested.

Salesman: It's just that I saw the Red Sox banner hanging next to your door, and I thought you might like to know how the team was formed and how they shaped the game itself.

Resident: That's in there?

Salesman: Sure. We've got sections on the Sox and all the other teams, plus entries on the history of baseball and many of its key players. You could even learn about Boston.

Resident: Sounds good, but I'm not sure I need a whole set

of books just to learn about one topic.

Salesman: You know, I couldn't help noticing your lovely flowers here in the front yard. What kind are they?

Resident: Gardenias.

Salesman: They look beautiful. Are they easy to take care of? **Resident:** They're supposed to be, but it wasn't so great this

season. I'm lucky these even made it this far.

Salesman: Maybe you could use some resources on garden-

ing practices or the gardenia itself.

Resident: You have that?

Salesman: Oh, yes. Along with information on weeding, pest control, weather patterns, and even how to attract butter-flies to your garden.

Resident: Hmm, butterflies are nice.

Salesman: That they are. Maybe you'll see some the next

time you go hiking.

Resident: How do you know I'm into hiking?

Salesman: There's a bumper sticker on your car with a

Yosemite symbol. When did you visit?

Resident: Oh, yeah, I hiked Yosemite last year.

Salesman: Are you looking for a new spot? Because you can learn about many more national parks—say, Mount Hood—in our books. We have information on terrain, geography, wildlife, all of it. There's even information on the National Park Service.

Resident: So, you're telling me your resources can help me support my favorite baseball team, make my garden look better, and help me explore more of the world around me?

Salesman: That's right.

Resident: Here, take my money!

Take a tip from Jurassic Park and ask your clients and patrons what they're passionate about and what's causing them problems. Then tell them how their world could be bigger and better thanks to your library. **SLA**

10 Questions: Susan Makar and Amy Trost

THE CO-AUTHORS OF THE BEST CONTRIBUTED PAPER AT SLA 2018 DISCUSS THEIR INTEREST IN BIBLIOMETRICS, THEIR DIFFERING PERSPECTIVES ON SOCIAL MEDIA, AND THE CHALLENGES OF WORKING WITH SCIENTISTS AND FUTURE SCIENTISTS.

BY STUART HALES

ibliometrics are measures that are used to assess the influence or impact of an author and his/her works. How fitting, then, that a paper about bibliometrics would be judged the best—and, thus, the most authoritative—contributed paper presented at the SLA 2018 Annual Conference.

The paper was written jointly by Susan Makar and Amy Trost, who had worked together at NIST, the National Institute of Standards and Technology (Amy has since left NIST and now works at the Universities at Shady Grove, part of the University of Maryland). Susan had previously presented a contributed paper, at SLA 2015; that paper, coauthored with another NIST colleague, Amanda Malanowski, was also about bibliometrics.

"One of the things that attracted me

to the job at NIST was the work that Susan and Amanda had been doing in bibliometrics before I got there," Amy says. ". . . [B]ecause we were experimenting with so many different kinds of procedures and methods, it was something that was interesting to write about."

Information Outlook caught up with Susan and Amy to ask about the paper and also about their shared interest in science and librarianship.

Your paper, "Operationalizing Bibliometrics as a Service in a Research Library," was judged the best contributed paper presented at the SLA 2018 Annual Conference. What was the impetus for writing the paper, and what were its key findings?

Susan: Part of the impetus is that

we're always encouraged to be engaged professionally, to attend conferences and present at them, so that was definitely part of it. But also, I think what we were doing was pretty interesting, and we thought it would be great to share it—something that went beyond the regular bibliometrics that we typically had done at NIST. We were exploring those things, and Amy can talk more about that. But we just wanted to share some of the exciting things we were doing.

As far as key findings, I think the importance of interacting with our customers and how the iterative process of going back and forth with customers to figure out what they wanted and what they needed was one finding. Talking to our customers and learning about their needs and what they found important was another important finding. The collaborations they were having with writing publications, the impact their work had on their subject areas—those were some of the things that I thought were interesting.

Amy: We were exploring different ways of demonstrating research impact, and we were also exploring different ways of using large search result sets

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to see what kinds of trends or patterns we could find—things like key words and abstracts and titles. So we had to work closely with our colleagues, with the scientists that we were supporting at NIST. And there were quite a few failures as we went along—we would run an analysis and there would be nothing useful that would come out of it.

So, in that way, I think because we were experimenting with so many different kinds of procedures and methods, it was something that was interesting to write about because there were a variety of approaches that we took. And it was also interesting to share it with our colleagues in SLA, because I've been a member of SLA since library school, and it's a great group to bring some of these things to and learn what other libraries are doing. So that was a lot of the reason why we chose this venue to share the paper.

Susan, you also presented a contributed paper at the SLA 2015 Annual Conference, with another NIST coworker, Amanda Malanowski. How did your experience working on that paper compare to your experience working on this one?

Susan: I sort of see the experiences being similar in the sense that both Amy and I, and Amanda and I previously, were working on projects together, so it made sense to collaborate on a paper together. I think the first experience was new and different for both Amanda and me; with the 2018 paper, I had the first one under my belt, so it helped me understand better what the process was as far as sharing information.

I think, with the first paper, we were maybe operating at a bit of a higher level where we were going through the process of how things evolved with bibliometrics at the NIST Research Library. In the second paper, with Amy, we got more into the details of how we actually did the work on the projects. So that's one difference—the two papers sort of operated at different levels.

I did feel like, after writing the first paper, I was more comfortable the

second time with respect to what to write and how to write it. I enjoyed both experiences; I learned a lot from both Amanda and Amy as we worked on these papers together.

In both cases, I tended to let the other person work more with the data analytics, and I was more involved in weaving the story and connecting things together. So that's how I would compare the two.

Whose idea was it to write this paper, and how did you collaborate on it?

Susan: I would say that I might have suggested writing a paper, but the idea of what we wrote about was Amy's idea, so I'll let her talk about that.

Amy: Yes, I think it was Susan's idea to write something about our work, and then I suggested we try a synthesis of a few of the different collaborations in which we'd engaged in the last year or two so we could show how our work had evolved and highlight the different kinds of analyses we'd done and see if we could identify any themes. I think part of it was just helping us make sense of the work we had done and put it in context. It was sort of a nice synthesis activity for us to create the paper. And we sat next to each other at NIST, so collaborating on it was pretty easy.

Susan: We worked pretty closely on all of the projects we discussed in the paper, and we were talking to each other about a lot of things. I don't even think I knew her phone number—I didn't need to, because we were next to each other.

With the paper itself, we split the case studies and each of us took the lead on a couple of them. We were both involved with all of the projects, so we shared the collaboration in that sense. So, yes, we worked very closely on all of the projects we discussed in the paper, so it was natural for each of us to contribute what we worked on.

How did you feel when you learned that your paper was judged the best? Did you share the news with family, friends, and co-workers, or did you just con-



Susan Makar



Amy Trost

gratulate yourselves quietly and act as if nothing had happened?

Susan: I was really excited about it. If I remember correctly, I think we both learned about it together. My first reaction was to send my supervisor and her supervisor an e-mail saying our paper had been judged best paper. So I shared the news with co-workers first.

Typically, in cases like this, our supervisors will send out an e-mail saying, "Amy and Susan won this best paper award." And then we'd hear from our colleagues congratulating us. We never

got a party, unfortunately ...

Amy: It was summer—people were on vacation. (laughs)

Susan: I don't know whether I ever even told my husband about it, which is kind of strange, although I think he learned about it when I went to SLA to present it. So I told my colleagues about it, but I don't think I mentioned it to my husband.

Amy: I told my colleagues here at the University of Maryland at Shady Grove, and they were all very happy, which was nice. And I told my husband, and he was very happy. Also, I told my dogs, but I don't think they understood. (*laughs*) So I guess I told everybody.

It's never necessary to get recognized, but I think we always appreciate it when we do.

Speaking of sharing the news—Amy, you're active on LinkedIn and Twitter, but Susan, you seem to be largely AWOL from social media. What considerations influenced your differing approaches to using social media?

Amy: I think it's just another way to communicate with your network. Different social media platforms have different user networks and different personalities, so, for example, my persona on Facebook is more like my holiday card persona. It's more superficial and veers more into the personal. As for Twitter, you can use it in a lot of different ways. I maintain my Twitter account as a professional account, so when I attend a conference or there's an event that's live-streaming, I like to tweet about it and boost the presenters and speakers I like. And LinkedIn is, for me, what it is for everybody else—it's a professional networking site.

I think my presence on social media is a work in progress. I've made the transition, since Susan and I worked together at NIST, to academic librarianship, so I'm affiliated with the University of Maryland Libraries now. And if you're in academic librarianship, there's an expectation that you have a persona—not necessarily a persona, but a presence—within the profession. So I'm

experimenting with that as well, with different ways of communicating professionally. And as I said, it's a work in progress.

Susan: I think probably the main reason I'm not out there on social media is that I'm a pretty private person. When you're professionally involved on social media like LinkedIn and Twitter, it's not that you're sharing personal information, but I feel uncomfortable being out there. I know my papers are out there and my name is out there and I probably have some photos out there now, but especially when it comes to things

Amy: I've been in quite a few careers—I was a computer programmer, I was a policy analyst, and I was also a teacher and a Peace Corps volunteer. When I decided to go to library school, I think it came from my love of teaching and my passion for knowledge organization. I had spent a lot of time organizing and running a database for a nonprofit where I worked—it was a collection of international policyand development-specific statistics. It doesn't sound exciting, but it was actually a really cool reference collection. And it just turned me on to the power

"As far as what I get out of SLA, it's always going to be the chance to interact and network with other librarians."

-Susan Makar

like photographs, I've always tended to be very protective of my privacy. Maybe it's part of being an introvert and not wanting to share too much about myself.

I also think that, knowing how some information can be misused and the risk of identity theft, those issues have sort of affected my decisions about using social media and having a presence on the web. And my job here at NIST is probably different from Amy's position in academia—we don't really face much pressure here to engage in social media. With NIST being a government agency, I don't feel like I would be able to speak about my work, so anything I would do on social media would just be private things I would do on my own. So that also makes a difference in how I feel about using social media.

Both of you came to librarianship from science backgrounds—Susan, you majored in biology, and Amy, you majored in engineering. What made you want to become librarians as opposed to, say, scientists?

of information. I care about information and sharing it with people, and I care about educating folks about finding and accessing information. It was never that I didn't like science; it was that I wanted to apply my engineering background in this way.

Susan: I've always liked science, ever since I was in high school. In college, I knew that I was going to be a science major, and I particularly enjoyed biology. At one point in time early in my college career, I was a pre-med student. So I really loved science.

But as I went through my classes, although I really liked them, I found that on the weekends I would be re-doing my chemistry experiments because they didn't work the first time I did them. So I sort of felt that maybe being a scientist or researcher in a lab might not be the thing for me to do. And I felt kind of isolated when I was doing the lab experiments, no matter what the subject area. I just preferred to work with people.

I also found that, as I progressed through my four years of college, I

really liked a lot of other subject areas. So I found myself taking anthropology, poetry, art history, and religion classes. And I was feeling like, it's not just science that I enjoy—I like a lot of different subject areas.

And when I was in college, I worked in the library. That was the part-time



Susan co-presents a workshop at the 2016 American Academy of Forensic Sciences conference.

work I did to help myself get through school. But I wasn't thinking about being a librarian; at the end of my four years of college, I really didn't know what I wanted to do because I was interested in so many things. I ended up going to medical technology school and spending a year being a medical technologist. That was really not what I wanted to do; everything's always interesting at first, but then you get into a routine of doing the same thing over and over again.

So I decided that I was going to enter library school because being a librarian meant that I could explore all sorts of

different subject areas. I had access to all this information; I could work with people; and I could work in a science library or in an institution and still be involved in science, but have this different perspective of working as a librarian.

So that's how I ended up as a science librarian. I was able to combine my interest in science with my interest in working and interacting with people, not just work in a lab.

What are the particular challenges and benefits of working with scientific researchers and those studying to enter that field?

Amy: One of the big challenges in working with scientists is the technical nature of the material—it can be very challenging. And when you're working with senior scientists at, say, a place like NIST, you're trying to engage in a highly specialized subject area. It can be difficult, as you're conducting searches and looking for information, to really discern what kind of information they need. But that's also what makes it extremely rewarding.

When you're working with students, the technical nature of the material becomes a particular challenge also—not so much from the point of view of *my* understanding of it, but from the point of view of *their* understanding of it. When I was working at NIST, the challenge was to translate something complicated into simpler terms for myself. Now, I feel my challenge is to take something complicated and translate it into simpler terms for my students.

Susan: I agree with Amy as far as the technical nature of challenges. It's always a challenge to understand what researchers are working on—I don't have that kind of depth. But I think another challenge is helping them figure out what they really want. Having a successful reference interview can help them figure that out.

As far as benefits, every time I work with a scientist on a project, learning about what they're doing and the

impact of what they're doing is pretty amazing. I'm constantly learning from what they're working on and being a part of their projects. I understand NIST better with each project I work on.

Why did each of you join SLA, and what do you get out of it?

Susan: Before I joined SLA, I worked in a couple of academic libraries for about 12 years. It wasn't until I came to NIST that I joined SLA. I was an ALA member from the very beginning of my academic career, but when I came here to NIST, it seemed to be sort of an expectation that SLA was the organization you would join. At least that was my feeling, because the NIST Research Library lent itself more toward being a special library. So it was sort of an expectation when I came to NIST that I would join SLA.

As far as what I get out of SLA, it's always going to be the chance to interact and network with other librarians. I don't do that often enough—I get very focused on my work here at NIST. But I think I've attended most of the SLA conferences in the last few years, and that is the one time when I can be out there meeting new people and learning what other librarians are doing. That's really what I get out of it.

I've also had opportunities to do program planning and be the Chemistry Division chair. Certainly through those roles, I've met a lot of fellow chemistry information specialists. So SLA has really provided me an opportunity to learn from others and meet other librarians.

Amy: I joined SLA five years ago, when I was in library school, and I've stayed involved in the organization since then. I think the reason I enjoy it is because it's a very diverse organization and it's small relative to some of the other library organizations out there.

When I was president of my SLA student group in library school, I remember we were recruiting new members and the branding we used was, "It's a big tent—come join SLA." And we had these circus tents on the materials. I think, to this day, that remains

the appeal of SLA to me. Even as I've made the transition from being a federal librarian to an academic librarian, I can show up at a conference and I can find a whole new group of colleagues who are doing similar work to what I'm doing.

So I think the diversity and variety are really nice. And this year, attending the conference as an academic librarian rather than as a federal librarian, in some ways it was like attending the same conference as in the past, but in other ways it was like attending a whole new conference. So that was kind of cool.

Speaking of SLA, you've both qualified for free registration to SLA 2019 by virtue of writing the best contributed paper. Do you plan to use the savings to attend other professional conferences or meetings? How do you stay abreast of developments in science librarianship?

Susan: Yes, I do plan to use that \$600 to attend other conferences. One great thing about being in the Washington, D.C., area is that there are a lot of conferences and opportunities to learn. For example, just recently I went to the NFAIS Open Access Conference; I also attended the National Academy of Sciences Journal Summit. And I will definitely take advantage of the free registration to SLA 2019, which I plan to attend.

Attending conferences and workshops in this area is how I keep up professionally. Additionally, I read the listservs for the Chemical Information Division of ACS, the American Chemical Society. Listservs are how I learn about what's happening in a lot of different areas. I probably don't network as much as I should, and I don't read as much as I'd like to read—it just seems I'm always busy with my work here at NIST. So I definitely take advantage of conferences and workshops.

We're strongly encouraged at NIST to do these sorts of things, so we do have that support. And we have money for travel, at least for the coming year. So workshops, conferences, and so forth are how I keep up with developments in science librarianship.

Amy: I would say I keep up with developments by relying on the aca-

lot of public librarians, so it's a different professional group altogether. It will be really nice to see them in December. And I stay involved in the Maryland Chapter of SLA.



Amy and her son enjoy a hike in Shenandoah National Park.

demic literature, but it's not something I regularly scan. I usually will conduct a search if I have a particular research question—for example, I'm trying to expand the data services program here at my library, so I'm doing a lot of literature searches and reaching out to librarians at other institutions with that strategic goal in mind.

My colleagues are great resources, both here at the University of Maryland and previously at NIST. I rely a lot on informal conversations and discussions with them to learn about their views on developments in the field. Also, on a more informal level, I belong to a small group of librarians called the D.C. Science Librarians. We meet about four times a year in various libraries around the D.C. area; in fact, NIST hosted a session last year. That's a nice cohort to learn from about science librarianship.

And as Susan mentioned, there are a lot of conferences in this area. Here at Shady Grove, we're hosting a conference called the MD Tech Connect Conference. That's actually attracting a **Susan:** I would agree with Amy that my colleagues are always a good source of information. We do try, after we go out to a conference or workshop, to come back and share. So that's another important source of staying abreast.

The two of you are at different stages of your respective careers—Susan has been a librarian for 30-plus years, while Amy just received her MLIS a few years ago. What advice would you share with each other to gain a fresh perspective on your work?

Susan: One of the things I've appreciated about working with Amy is that, while I've been a librarian for a long time and I feel like I'm pretty receptive to change—and we've certainly gone through a lot of changes here at the NIST Research Library—but when you have people like Amy coming to work here at NIST, that type of person does bring a new perspective. And even if I think I'm receptive to change and on top of things and know what's out there,

sometimes I need to listen to other people like Amv.

I've been in the business a long time, and I've learned there are always going to be different ways, and often better ways, of doing the work we do. And when Amy came to work at NIST, she sort of opened up this other area of looking at bibliometrics and got excited about it, and that got me excited about it. So I think that just having younger people around you, even though I have experience that I think is valuable to the organization and I have this institutional knowledge, it needs to be balanced with different perspectives on how to best do the work we are trying to do for the NIST researchers.

Amy: I would say the thing I appreciated about working with Susan on NIST projects is that she does bring the institutional knowledge because of the depth of her experience, both from working at NIST and from working in librarianship as long as she has. But I

"This year, attending the [SLA] conference as an academic librarian rather than as a federal librarian, in some ways it was like attending the same conference as in the past, but in other ways it was like attending a whole new conference."

—Amy Trost

don't think being in the profession for 30 years means you don't have a capacity for innovation. One of the things that attracted me to the job at NIST was the work that Susan and Amanda had been doing in bibliometrics before I got there. So it was great to be a part of that and to learn from them and to learn from the work they had done.

I think innovation and fresh ideas

and reinvention are happening for all of us, at all stages of our careers. Librarianship is changing so much right now, and the role of librarians and the work we are being asked to do is really shifting. And I think the way for us to thrive is to rely on each other as we establish these new work roles and functions in the library. SLA

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Operationalizing Bibliometrics as a Service in a Research Library

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Abstract

In 2017, librarians in the Information Services Office (ISO) of the National Institute of Standards and Technology (NIST) expanded ISO's bibliometric analysis services to include topical network analysis, bibliographic text mining, and deeper collaborations with stakeholders. The new services help NIST divisions and offices systematically assess research portfolios, document internal and external collaborations, and identify strategic areas for future research. While robust quantitative analysis has been the key to conducting bibliometric analyses and creating visualizations, collaborative relationships with customers are just as critical to understanding impacts and delivering the right answers to the right questions. This paper describes several use cases highlighting the new services, including a network visualization and cluster analysis to identify emerging research topics; an exploration of keywords in a single research area over the course of a decade; and a structured evaluation of collaborations within and outside of our institution.

Introduction

This paper shares the research and methodologies behind ISO's expanded portfolio of bibliometric tools and demonstrates a range of services that can be adapted for use in both academic and special libraries. Bibliometric analysis services can support research objectives from strategic planning to impact assessment, enhancing ongoing efforts to build collaborations with stakeholders.

NIST is a non-regulatory federal agency within the U.S. Department of Commerce (DOC). NIST's mission is to promote U.S. innovation and industrial competitiveness by

¹ Current affiliation is with the Universities at Shady Grove/University of Maryland Libraries

advancing measurement science, standards, and technology in ways that enhance economic security and improve the quality of life. ISO is responsible for creating, maintaining, organizing, and disseminating information to support the research and programmatic needs required to fulfill the scientific and technical mission of NIST.

ISO's path to operationalizing bibliometrics as a service involved responses to a series of customer requests in 2017, often related to strategic planning, that required quantitative analysis beyond traditional citation analysis and research impact assessment. ISO staff already had some experience with co-author network analysis, but had done little with topic or text analysis. The following projects helped ISO expand its bibliometric analysis services to include topic and text analysis, and more customized services.

- ISO's first collaborations involved the identification of emerging research areas relevant to NIST. Program staff became interested in ISO's work searching for "white space" or research opportunities in the strategic areas relevant to the Material Measurement Laboratory (MML).
- The MML collaboration led to a more detailed and focused study of NIST research in the interdisciplinary area of greenhouse gas metrology for a researcher in NIST's Special Programs Office.
- Several researchers have requested analyses of collaborations and co-authorship in their area of research, with a focus on how their specific laboratory contributes to NIST's body of work.
- Staff in NIST's Program Coordination Office wanted to create a network visualization of NIST co-authorship to understand how agency researchers collaborate across organizational lines.
- Materials scientists wanted to understand the landscape of artificial intelligence (AI) and machine learning to identify potential authors for a special issue of a journal, and to later write a perspective paper on AI and machine learning.

Each of these requests presented its own set of challenges. Sometimes the challenge was identifying the right body of literature; other times it was using the right analysis tools to show meaningful results. Close collaborations with researchers were necessary to ensure the project stayed on track and that ISO answered the requests with on-target deliverables. ISO staff met several times with each researcher or research group and emailed or spoke with them on a regular basis.

This paper looks at each type of request listed above and describes the challenges of each while sharing the methods and tools for delivering targeted results.

Background

Bibliometrics is broadly defined by the American Library Association as "the use of statistical methods in the analysis of a body of literature to reveal the historical development of subject fields and patterns of authorship, publication, and use." (Young 1983). Bibliometric activities by library practitioners have focused primarily on citation analysis and research impact assessment until very recently.

The papers written by library practitioners have maintained this narrower focus on the "quantitative measure of research output" (Bladek 2014, 330). For example, the bibliometric services described in Bladek (2014) and Leiss and Gregory (2016) include citation counts, hindex calculations, and impact factor measurements along with customer training and engagement.

This pattern in the literature mirrors actual practice in research libraries, at least in the early part of this decade. Corrall, Kennan, and Afzal (2013, 650) surveyed the bibliometric activities of 140 academic libraries and found that the dominant forms of support offered, after training, were citation reports and calculations of research impact. Cox et al. (2017) develop a competency model for bibliometric practitioners through a survey of 92 practitioners. Many of the "core tasks" emphasized by respondents related to research impact assessment, while tasks such as text mining, network mapping, and keyword analysis were assigned a more peripheral role.

In addition to studying research impacts, academics have been mapping the structure of the sciences and other disciplines since the 1980s; more recent advances in computing allow for a dynamic view of the evolution of research areas (Mingers 2015: 11). Recently, library practitioners have adopted these techniques as well. Eddy and Solomon (2017) document an extensive range of activities, including keyword analyses and journal level co-citations. MacDonald and Dressler (2018) identify research fronts with keyword co-occurrences.

Work in ISO has evolved, also, from an initial focus on h-index studies and journal impacts (Bruss 2013). ISO's services expanded to include bibliometric analysis of collaborations across institutions and geographic regions (Makar 2015). Analyses of paper sets in specific subject areas (Makar 2016) used network analysis to show the structure of scientific subdisciplines. The case studies below build on this work by identifying emerging areas of research, tracking changes in a discipline over time, mapping intra-agency collaborations, and broadening the bibliometric support services available to library customers.

Case Studies

Identifying Emerging Research Areas

In early 2016, researchers in the Material Measurement Laboratory wished to identify emerging research areas where NIST could have the greatest impact on industry and society. We

decided to assist in this effort to identify "white space"—potential new research areas adjacent to current work—through a combination of literature searches, text analysis, and network visualizations. Guided by the Laboratory's strategic goals (https://mmlstrategy.nist.gov/), we performed two analysis projects with two focus areas: microbial metrology in late 2016 and water quality metrology in early 2017.

Search strategies for identifying the two metrology paper sets involved harvesting keywords from strategy documents and identifying important journals. These searches were difficult because we were often looking across disparate disciplines for metrology-related work. NIST's work focuses on measurement science in the areas of physics, chemistry, biology, and engineering. Some analysis considerations included the size of the paper set returned and the level of connection between papers, based on authors, citations, keywords, etc.

We experimented with a variety of bibliometric and visualization tools to both learn about the paper set and see what kinds of analysis would be possible. Our initial analysis focused on keywords: we extracted keyword frequencies in Bibliometrix (a package available for use with the R statistical computing language) and identified emerging or "bursting" keywords with the Science of Science (Sci2) algorithms². While the keyword analysis provided some insights about new research methods and instrumentation, more useful topical analyses were generated using CiteSpace visualizations of clustered disciplines and keywords.

Figure 1 shows the linkages between keywords and disciplines in the microbial metrology paper set. With a cluster analysis of this network, we identified trends that may be of interest to our customers, including: real-time monitoring of aerobic biodegradation, spectrophotometry in food production facilities, and stable isotope/high precision concentration measurements for methane.

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² Identification of commercial entities is not intended to imply recommendations or endorsement by the National Institute of Standards and Technology.

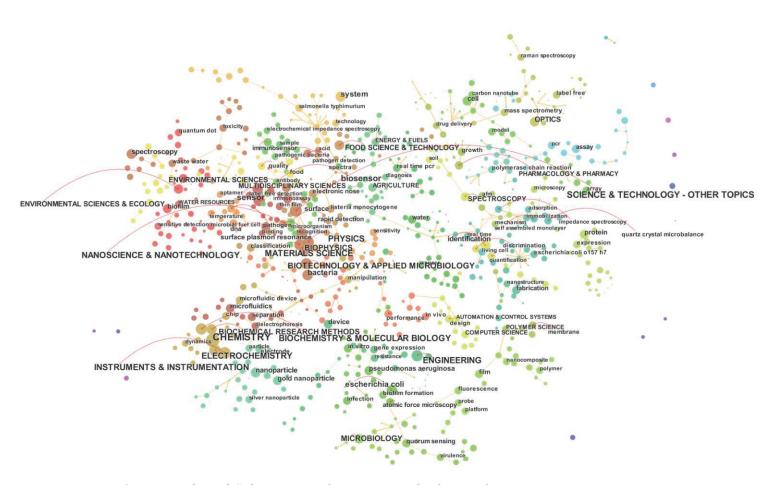


Figure 1. Keywords and Subject Disciplines in Microbial Metrology

Figure 2 shows groups co-occurring keywords related to water quality metrology. A spectral clustering algorithm (Chen et al. 2010) identified 12 groups, or clusters, of keywords. Several recently emerging clusters are described below.

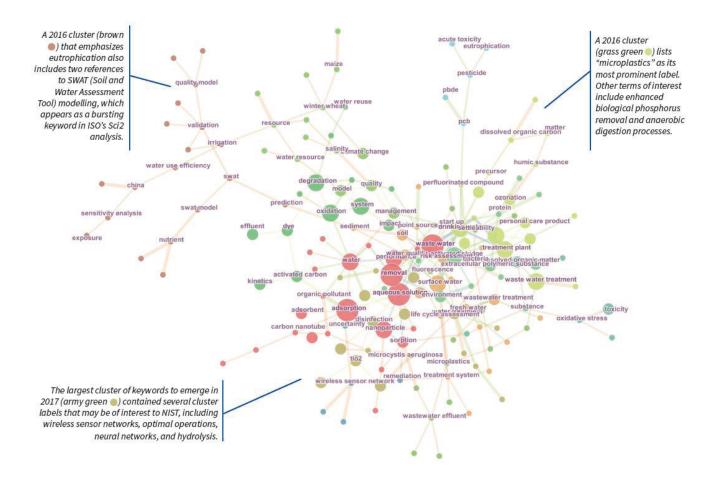


Figure 2. Emerging Clusters of Subject Keywords in Water Quality Metrology

These analyses, which were in many ways more ambitious than later efforts, presented some challenges. Large paper sets from disparate disciplines were not closely interconnected. This low modularity limited the types of networks that we could create. Rather than co-citation or co-author networks, we connected papers via common subject keywords. The resulting visualizations were interesting to generalists but lacked the specificity to inform experts in the field. We remain confident, though, that this type of predictive analysis will continue to grow in importance as text mining algorithms improve.

Keyword Analysis over Time

In the summer of 2017, we were contacted by a customer who coordinates a large portfolio of research projects related to greenhouse gas measurement. She was interested in learning how the field had evolved in the past five years and asked for assistance at the library information desk after viewing some of the network visualizations already completed by the library staff to track research sub-disciplines in forensic science. After a series of initial meetings, we decided the best way forward was to track trending keywords in the publications of the 62 principle investigators associated with GHG measurement.

The initial search was straightforward, but creating the paper set was tricky. There were many discussions with the customer about distinguishing different areas of research by the same investigator in order to limit our search to only papers related to greenhouse gas measurement. After several search iterations, the final paper set was narrowed to include 522 journal articles, proceedings papers, and reviews published between 2013 and 2017.

To provide the customer an overview of the research portfolio, we created a summary report of the full paper set with author and organization names, research areas, and keyword frequencies. This information was gathered from *Web of Science*'s Citation Reports and enhanced by a Bibliometrix summary report in R. Next, with the CiteSpace tool, we generated a keyword co-occurrence network for the paper set. Each keyword, despite occurring over multiple years, was only assigned a single year based on changes in frequency from year to year: what CiteSpace calls "time slicing." The networks generated by CiteSpace were exported into the Gephi network visualization tool. Network visualizations of keywords peaking in 2013 and 2017 are found below in Figure 3 and Figure 4.

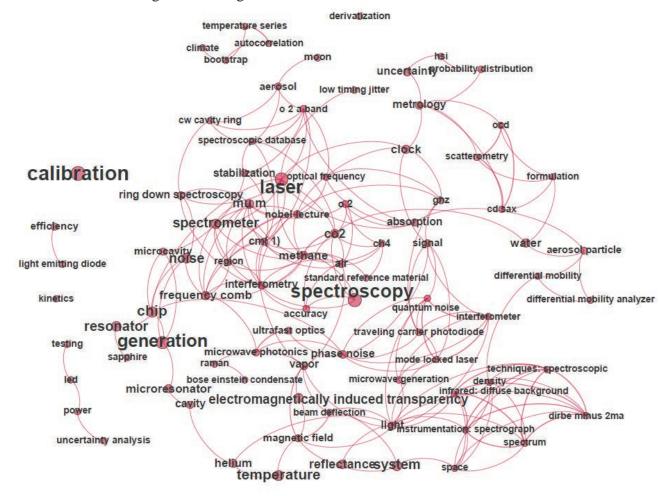


Figure 3. Keyword Frequency and co-occurrence, 2013.

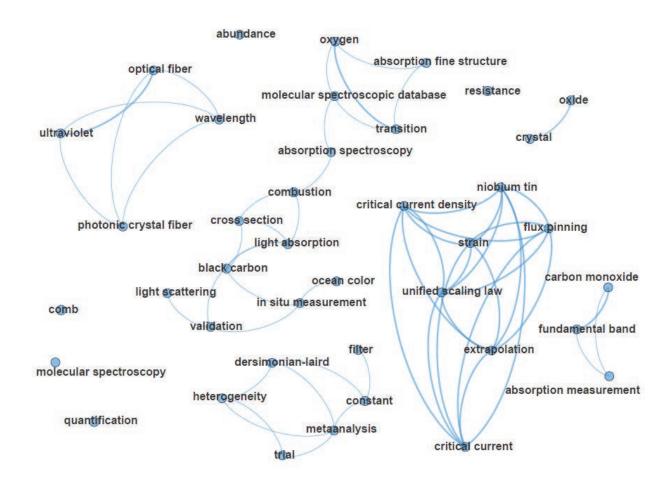


Figure 4. Keyword Frequency and co-occurrence, 2017.

Because the paper set was carefully curated and the researcher was maintaining a broad disciplinary focus, keyword networks were useful here. In other collaborations, we have found keyword terms to be too general to provide insight into the evolution of a research area.

Mapping Collaborations

With more than 2,000 researchers publishing in scientific journals each year, the structure of collaborations, both within NIST and with outsiders, is of keen interest to NIST management at many levels. Below we describe three bibliometric analyses performed to assess both collaborations within NIST and the prevalence of NIST researchers in the body of literature for specific subject areas.

In September 2017, a scientific advisor who was working on strategy and road-mapping approached us for help analyzing a body of environmental literature. She wanted to understand the contributions of her lab, the Material Measurement Laboratory (MML), relative to other environmental science work at NIST. In this case, continuous collaboration with the customer allowed us to generate a set of results very useful to her. We provided her with a list of 2,636 articles, reviews, and proceedings papers. She narrowed this count by hand to 468 papers with

any sort of emphasis on environmental science, and assigned each environmental science paper to one of 13 topic areas. We then used a simple text matching script in R to match the author records to an employee directory, illustrating her lab's involvement in various topic areas (see Figure 5). Our customer's lab (and the divisions within that lab) was involved in nearly half (233 out of 468) of the papers, with a particularly high representation in environmental chemistry (55/81 papers) and exposure (53/73 papers).

A second MML scientific advisor then asked us to assess MML's current involvement in chemical manufacturing and identify potential challenges and opportunities for the lab. Once again, we combined our own internal records about NIST staff with bibliographic records from *Web of Science* to identify MML authors in 258 of 524 articles in this paper set. In this case, the scientific advisor, being the subject matter expert, provided a list of keywords. Our initial search results, based on these keywords, proved to be too broad upon review by the customer. She then tightened and modified the list of keywords, and we reran the search. This time the search results were on target. The effort was successful because we worked very closely with the customer through an iterative process to identify the appropriate paper set.

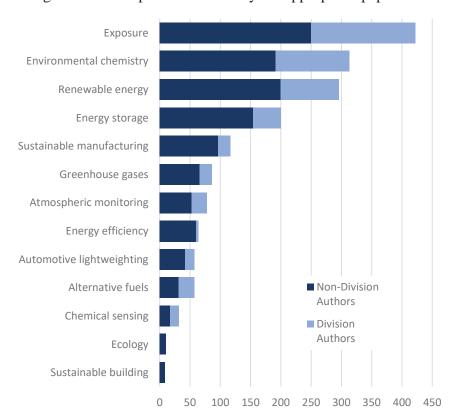


Figure 5. Authorship by Focus Area in Environmental Science, 2016 and 2017

Finally, staff in NIST's Program Coordination Office wanted to understand the full extent of collaborations across divisions within NIST. In this case, the paper set was relatively easy to

identify. The bulk of the work involved assigning each author in *Web of Science* to a NIST division. This was accomplished through a combination of scripting and manual examination. The resulting database of more than 2,000 NIST authors and 3,416 papers could be queried to show collaborations at the individual, group, or institutional level. We built our own node and edge tables using a relational database and created a series of visualizations in Gephi that were very useful to our customer, showing the number of publications (dot size) and number of collaborations (line thickness) (see Figure 6).

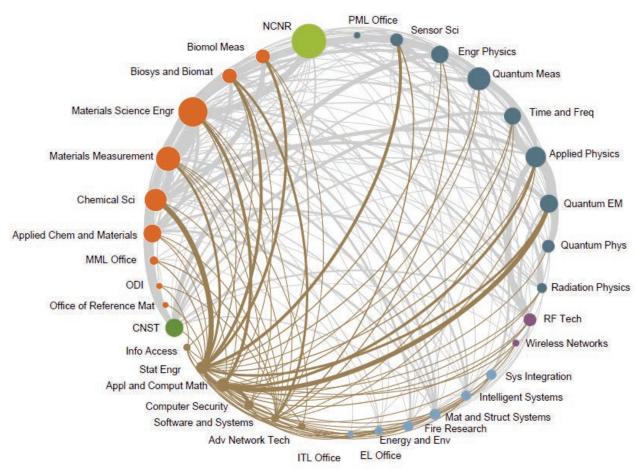


Figure 6. Collaborations within NIST, 2016 and 2017

With continuous communication and meetings, we were able to discern the real intent behind customer questions. This meant that the customer also needed to consult with her colleagues to discuss options as a follow-up to our meetings with her. Communication became the key to meeting and even exceeding the customer's needs and expectations.

Landscape Analysis and Assessment

In January 2018, a group of materials scientists approached us for help in understanding research related to artificial intelligence (AI) and machine learning within their discipline. More

specifically, the scientists were interested in identifying potential authors for a special issue of a journal and illustrating this process though a perspective paper about the use of AI and machine learning to identify authors and emerging topic areas.

We already had experienced difficulties searching the AI and machine learning literature in the *Web of Science* database by keyword; *Web of Science* does not offer subject indexing or a thesaurus. Since machine learning can be described in many ways, important articles might have been missed. Even the search for AI articles proved problematic since not all AI was relevant to the researchers.

We then decided it was best to perform author searches for individuals who were known to be working in NIST's fields of interest. However, this posed a different set of challenges, since there were over 100 researchers, who over the course of 10 years may have worked at multiple institutions and published research results outside of AI and machine learning. We retrieved 7,177 papers of varying degrees of relevancy, but our customers were comfortable with this limited precision so long as all important papers were included in the set (100% recall).

We conducted some initial analysis on this paper set in Sci2 and Gephi, and linked bibliographic data with employee directory records. We also educated the researchers about the tools we had used in the past, noting the strengths and weaknesses of each. However, in a departure from previous collaborations, these researchers conducted much of the bibliometric analysis themselves. Using our work as a starting point, they applied machine learning algorithms and topic models using Python libraries to isolate the most relevant papers in the initial set.

We intend to replicate our approach to this project with other NIST researchers. This hybrid model of both creating and enabling analysis would be effective at any organization with a highly technical scientific workforce. Similar work is already in the offing with other labs, as we are beginning a partnership in Spring 2018 with the nanofabrication research group to uncover emerging areas of research in their field.

Conclusions

ISO's expansion of bibliometric services has required a change in our standard practices. Search strategies have evolved to include larger paper sets in some cases and more explicitly linked papers in others. Staff have developed new expertise in a broad range of bibliometric tools and program libraries. The creation of new support services, which tie closely to a customer's existing research portfolio, requires a degree of interaction beyond that of a simple reference interview. ISO has found that a more iterative process with regular contact ensures the most useful end product.

ISO's current approach is limited by the amount of text available via a standard bibliographic search in *Web of Science*. We hope to conduct text analysis of all sections of a research paper in future collaborations, perhaps through the use of arXiv records or the public records of NIST's own research in PubMed Central. Future results will also be more useful to our customers as clustering and text mining algorithms continue to improve.

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Revising My Definition of Career Success

Viewing his library career in terms of his skills and interests rather than his job helped Tom Nielsen redefine what it means to be a successful librarian.

BY TOM NIELSEN, MLS

In August 2009, my father was dying of liver cancer and was leaving the hospital to start hospice care at home in Phoenix. I spent a week with him and my mom, helping with the transition, preparing meals, and reminiscing about the past. As I was saying goodbye before catching my flight back to New York, he told me he was proud of me for being successful.

In that moment, I was taken aback by his words. I had never really thought of myself as successful, but that comment is one of my lasting memories of my father because it forced me to think more about my career success and how I defined success for myself.

My father was one example of success that I subscribed to during my early years as a librarian. He was known in dozens of small towns in the upper Midwest as the guy to call to fix water treatment equipment. His Rolodex was extensive, with contacts in five states and enough work to be able to afford a secretary and two part-time assistants and support a family of seven. I understood his success as his ability to leverage his technical knowledge and create a lucrative niche business for himself. His competent, flexible, and folksy manner appealed to the munici-

pal managers who hired him.

As I began my library career, I defined "successful" librarians as those with a six-figure salary who managed a large staff and/or library and participated in professional associations (among other things). I got off to a rocky start, working part-time at an academic library and consulting at a hospital. After a year of looking, I finally landed a full-time gig at a government library, where I encountered my first example of library career success. My manager was a powerhouse who seemed to handle all manner of library situations with ease, was active in ALA and prominent library e-mail lists, wrote a column in Library Journal, and was writing a book. Unfortunately, she left after a year, causing my work attitude to plummet. I was eventually fired, thus realizing one of my worst professional fears.

I didn't know it at the time, but my next job was the perfect position for me at that moment—managing a small, neglected, behind-the-times engineering firm library. My competence shot up because I had a hand in all aspects of the library: cataloging books, maps and design drawings; creating databases of our remotely stored documents and reference requests; developing a strategic

plan; moving the library and overhauling the outdated online catalog system; writing a newsletter; and creating an intranet. While there, I received invaluable advice from colleagues in the SLA Solo Librarians Division, participating in their ever-helpful e-mail list and sharing my successes with them. I wrote an article about transforming this library for *Computers in Libraries* and presented it at the conference of the same name. Unfortunately, I didn't give myself the credit I deserved at this job, because I was soon bored without a project to motivate me and focus my energies.

With a solid background in small library management, I was ready to take on a new challenge that materialized at my local multi-type library consortium. As member services manager, I could no longer "hide" in the library because I was now representing the organization to advocate for members and member libraries. My charge was to create an individual membership category where previously there had only been organizational memberships and to develop events and learning opportunities that would bring together the local library community.

My network (and confidence) swelled, and I met many librarians across the state and at national conferences, including librarians I deemed successful—the six-figure, large-library directors. But as I listened to these librarians talk about their work, I tried and failed to see myself in their shoes, instead feeling overwhelmed by the issues they faced. And when I was laid off from this position after almost 10 years, I felt lost, in part because I hadn't resolved how I defined success for myself.

In hindsight, the context around

Continued on page 37



TOM NIELSEN is an adjunct librarian at the Bronx Community College in New York. He previously has held library positions at the Metropolitan New York Library Council, a law firm, an environmental engineering firm, the EPA Region 2 library, and Polytechnic University in Brooklyn. He is finishing a three-year term on the SLA Board of Directors, serving this year as past division cabinet chair. Contact him at escapefromnyc@gmail.com.

Improving Your Professional Image Online

Four simple steps can help raise your online profile while also reflecting more positively on your career.

BY SOPHIA GUEVARA, MLIS, MPA, AND SENOVIA GUEVARA, MPA

How much time do you dedicate to maintaining or improving your physical appearance? Is it a few hours a week? More than you'd care to say?

While most people would probably acknowledge that their physical appearance is something they actively work on, few would say the same about their online image. But while maintaining your online image may not be a priority for you, it can quickly become one when searching for a new professional opportunity.

In 2011, *Business Insider* published an article titled "9 Reasons Why Your Image is Everything." In the article, authors Judith Aquino and Kim Bhasin stated that first impressions matter and that it takes less than a second for a stranger to form one (Aquino and Bhasin 2011). In addition, they noted that employers are increasingly using social networks to screen job applicants.

Your online image has far more reach than just a potential employee-employer relationship. So, how do you put your best virtual foot forward?

First, develop content that can show up as a search engine result. If you're a

member of a professional organization like the Special Libraries Association. think about serving as a member of a council or committee or on an executive board. Your name typically will be listed on the organization's website and more than likely be found by search engines. Not only will you enhance the search engine results associated with your name, but by serving with other professionals on committees or boards, you are more likely to be seen as having expertise or interest in an area (such as technology, leadership, or business) that may also be of interest to a future employer or client.

Second, consider creating social media accounts, even though you may not plan to be very active on a particular platform. If nothing else, this will allow you to effectively "park" accounts in your name so that no one else with the same or a similar name can take those accounts. That said, you should consider taking the plunge into social media if you haven't yet done so.

One example of a social media tool that can help make you more visible to those searching for you is Twitter. Twitter is a social media tool that con-

nects users with each other. Messages sent from Twitter, known as tweets, are often directed at others by using the @ sign along with the other person's account handle.

Large discussions known as Twitter chats bring together a group of Twitter users for an online chat about a certain topic. These chats often benefit those hosting them by generating additional mentions of their Twitter handle, attracting more followers, and creating more awareness of their organization or cause. Those participating in the chat benefit as well by connecting with others around a certain issue or discussion topic and learning from others while sharing their own expertise. Oftentimes, those participating in the chats also gain additional followers because their tweets within the discussion are of interest to others. These tweets are very easy to discover and, depending on how well vour Twitter handle is associated with your name, will enhance the search results associated with your name in search engines.

Third, ask yourself whether there is any online content that was developed in the past that might not reflect well on you today. A warning about this was written into the title of a *Scientific American* article titled "The Internet Never Forgets." The article describes a video submitted by a young man to an investment firm to help him land a job. The video ended up being shared with others online, and the rest is history.



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While the content you might be having second thoughts about may not become as well known as the video cited in the article, consider taking steps to reduce the probability of accidentally sharing it outside your inner circle. First, check the security or sharing settings on your social media accounts. Think about whether you should make your content private. Also, run a quick search on some of the major search engines and identify any old tweets or posts that might be out of date. Report any outdated results to the search engines.

Fourth, look at search engine results that provide personal information (such as your age) that could reduce the probability of you landing your next professional opportunity. Examples of such sites and instructions on removing yourself from them can be found in

a Lifehacker article titled "How to Opt Out of the Most Popular People Search Sites" (Allan 2017).

Putting your best foot forward takes time and effort. Be smart about the content you share and post. **SLA**

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Aquino, Judith, and Kim Bhasin. 2011. "9 Reasons Why Your Image is Everything." *Business Insider*, December 10.

Info Careers

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which my Dad defined success was much more generous and flexible than mine. For me to come to my own definition, I had to let go of my expectations and identify the skills and knowledge I can leverage. Although it took me another year to bring everything together, I think I've succeeded in defining my success as being in control of my life and not being defined by a particular job.

Two days a week, I'm a community college adjunct librarian; two other days, I'm a farm intern at my local botanical garden. This is a nice balance of my professional and personal interests that keeps me sane and financially sound. I know my father would be proud of me. **SLA**

