We are Crossref, a not-for-profit membership organization for scholarly publishing working to make content easy to find, link, cite, and assess. We do it in five ways: rallying the community; tagging metadata; running a shared infrastructure; playing with new technology; and making tools and services to improve research communications.

It’s as simple—and as complicated—as that.
The theme for this year’s annual meeting sums it up: Smart alone, brilliant together. When I think about the many accomplishments of the last year, it is clear to me that none of it would be possible without collaboration. It is at the core of everything that we do. In fact, you could suggest it’s the reason we exist.

The narrative in this year’s report is organized around our “truths” - the core values that we hold dear. Crossref staff and the board worked together to write the truths. In sharing them with you, we review many of the highlights of 2015-16 so that you can see, first hand, how the values are manifested in the services we develop and the ways in which we engage with our members and the community.

We continue to grow at a fast pace, which in and of itself is a major accomplishment, and affirmation that we provide value to our members and the scholarly community. We know that engagement is key to creating a sense of community and to encouraging participation, especially for smaller publishers. Our outreach activities remain a top priority. We have developed new communications and engagement programs, and hired new staff to meet the evolving needs of our membership.

The last year has been a real juggling act. We’ve tried to do a lot at once and we’ve had to work hard to balance multiple priorities and, at the same time, stay focused. In the last year we have really upped our game on a number of fronts. I am particularly proud of the fact that we’ve improved existing services like Crossmark while launching new services like ORCiD Auto-Update and adding preprints as a content type. What’s next? Keep an eye out for Event Data, a service that will supply raw data on post-publication activities around scholarly content beyond formal citation. We will also continue to collaborate with ORCID and DataCite on exciting new initiatives around organizational identifiers.

Thanks to sensible management Crossref remains financially sound. This enables investment in people and systems that will fuel our continued growth and the expansion of both development and member support. We have a great team and the structure required to meet the demands of a growing membership organization.

Looking at our trajectory, from Crossref’s founding and to how it’s grown, you might think that after 16 years we would be slowing down or levelling off. Nothing could be further from the truth.

It is often said, the best is yet to come. Events of the last 12 months would suggest that is true. Everyone who has contributed to our continued success—members, the board, our staff and the community at large—has much to be proud of. And we have only just begun!

The deliberate, careful expansion will continue in 2017 and beyond. It has been a great year and we’re poised for many more. Thank you for your continued support. We couldn’t have done it without you.

We’ve always had a broad mission and we’ve never been short on ambition. Now we’re better positioned to realize our goals.

Ed Pentz
Executive Director

Letter from the Executive Director
Letter from the Chair

Chair, Board of Directors

Bernard Rous

Scholars have resolved two billion references to their source documents on Crossref member sites over the past year. Our core business and original raison d’être is successful beyond expectation. This fundamental achievement has attracted a robust and steadily growing global membership. Healthy surpluses over the last five years have given us the opportunity to re-invest in a broader set of infrastructure services and a much expanded staff to develop and deliver them.

Scholarly publishing has seen many changes in the last decade. Its fundamental job of recording, communicating, and preserving the results of research remains the same, but the technologies and channels of production and delivery have evolved along with the organizations that perform this vital function.

Crossref has both responded to and helped shape some of these changes. As an entity, we are emerging from the shadows. Rather than a little-known provider of “invisible plumbing”, we have built on our success to firmly establish the Crossref brand as an innovator of scholarly infrastructure that directly benefits a number of stakeholders even beyond its publisher members.

At the same time, much of our new investment is going to improve support to members, particularly for smaller publishers who need greater support in making the changes required on their end to fully participate in the expanding set of Crossref services.

Your board has evolved as well. It continues to attract highly motivated publishers with more diverse perspectives and publishing experience who are willing to devote considerable time and energy to shaping and directing the evolution of our organization. We are most fortunate to have a truly outstanding staff, rife with talent and ideas of their own, to work with.

The rapid expansion and reorganization of staff over the past two years has been brilliantly managed by our Executive Director, Ed Pentz, the heart and soul of Crossref. I am looking forward to the coming year when the fruits of our investments can be harnessed in addressing several new challenges, foremost among them the disambiguation of author affiliation data.
Crossref completed 2015 in a strong financial position. Revenue of $6,656,678 was two percent positive to budget, against expenses of $5,810,688 yielding an operating margin of 12.7 percent, down two percent from prior year. Both revenue and expenses were up over 2014—revenue was up five percent and expenses were up eight percent, reflecting our investment in new opportunities. The 2015 year-end overall cash position of $4.7 million exceeds our Board mandated goal to cover one quarter’s operating expenses. Our cash position showed an 18% gain over the prior year-end allowing Crossref to increase its Capital Reserve Fund. The year 2015 brought another clean financial audit, with suggestions for a fuller system and security audit in the coming year.

The Treasurer, Executive Director, and Finance Director closely monitor Crossref’s financial and investment performance—maximizing return at minimum risk. Crossref’s healthy financial position ensures continued growth and contribution to its core mission of providing a sustainable infrastructure for scholarly communication.

Gerry Grenier
Treasurer

Letter from the Treasurer
A facilitator helped guide the July 2016 meeting of the Crossref Board of Directors, where we examined effective, best practice for the governance of an association board. The session covered a number of issues including the formation of associations, the importance of trust and information flow between the board and the association members, the role and responsibilities of the board, the use of the “representative governance” model, the importance of consensus, the role of the Executive Committee, and the use of meeting agendas as a tool for good governance.

Crossref is moving forward with a number of actions identified at the meeting, including developing new election and committee policies with a view towards increasing transparency, developing the strategic roadmap for 2017, and revising and clarifying financial policies.
Collaboration is at the core of everything we do. Our focus is on things that are best achieved by working together. We involve the community through active working groups and committees.
We are a global community of members, large and small, who publish scholarly content in all disciplines and in many formats. We define publishing broadly; your business model is your business.

Crossref membership continues to grow at a fast pace with 150 new members a month for a total of 1,600 new members so far in 2016. “There has been a tremendous expansion in membership,” says Lisa, who has been with Crossref since day one. “When we started we were half US and half UK/European members. Now the bulk of our new members are in Asia and South America, and we’re growing in all corners of the world. As a result, we’re starting to explore different membership models to cater to regional and cultural differences.”

As government research investments change around the world, so too does Crossref membership. “We’re seeing such a different range of new members joining—many of them smaller and open access,” ponders Ginny. “In Turkey there’s been a huge investment in research, Indonesia has recently instituted a mandate to register scholarly content, and there are loads of other such cases around the world.”

Growth in membership means a new approach to engagement. “How will we welcome and train all of these new members? We can’t just expect everyone to come to our meetings anymore,” observes Ginny. “And, it’s not feasible to make 150 phone calls a month so we have to adjust our thinking and focus.”

“One of our members don’t consider themselves to be primarily a publisher,” says Ed. “For example, the WHO doesn’t think they’re a publisher, but they do publish a lot of scholarly stuff. What we’re trying to do is build services that apply to different kinds of members.”

“We’re building our services to support publisher differences,” explains Geoffrey. “We’re doing a lot to change our system so that we can address different kinds of workflows. For example, a member might have a preprint, or reviews of content, that might not be considered formal publishing but it is, ultimately, scholarly communication. We need to create persistent links for all of that.”

Chuck expands: “The board’s decision to include preprints is an excellent example. We don’t make a quality judgment. Some might call it a preprint, some might call it a working paper, but there is more in common than divides.”

Responding to the needs of all publishers—whether large or small—is a priority for the entire team. “Different publishers want to register content in different ways. The new metadata deposit project will overhaul a pretty antiquated deposit form. We have people that can help them but we’re also building a system that will make new deposits and updates easy,” says Jennifer.

As Crossref and its membership grow, good governance becomes even more important. The organization is guided by its board and 16 years of experience. “Our board appoints a Nominating Committee each year which operates separately from the board,” says Lisa, “and the committee membership changes each year and includes non-board members, which means there is always a fresh perspective.”

“The Nominating Committee has a remit to propose a fair and representative slate,” adds Ed. “They look at organization size, type, geography, and evaluate potential candidates to be put forward as the slate for the board election every year.”

“The ‘one member, one vote’ truth also means extending the opportunity to use that vote,” says Ginny. “I’m pleased that our members have voted in record numbers this time around.”

Another board committee is the Audit Committee. “This important group helps us meet our fiduciary responsibility,” Lisa explains, “they appoint an independent auditor and oversee the financial reporting process.”

One of the most important committees is the Membership and Fees Committee which is tasked with making recommendations to the board about fees for new services and with monitoring current fees to determine if any changes are needed. The committee also discusses the policies associated with our services.

“Members also contribute to Crossref through committees and working groups,” says Ginny. “Participants play an important role in helping to develop project priorities and set policies. At Crossref, committees and working groups are valued contributors, not mere window dressing.”
We do R&D to support and expand the shared infrastructure we run for the scholarly community. Building on the metadata we collect, we use standard web technologies and create open source tools and services to help our members solve problems and meet best publishing practice.

“I’m a big believer in agile development,” declares Jennifer. “Cohesion and coordinated iteration is key. Now our teams are all working in concert using the same process so that we can develop, test, and deliver new products and features with more focus and speed which is better for our members.”

“We’ve been doing a lot of work developing Event Data which started by exploring how we can better expose when literature is referred to outside of the scholarly ecosystem—like Facebook, Wikipedia, etc. We’ve done a lot of work to engage with those communities and we’ve been working to collect information from our referral logs on how and where content is talked about,” says Geoffrey.

“In general, almost every service that we’ve launched, every new functionality that we’ve added, is collecting and using another set of metadata and increasingly that’s non-bibliographic metadata like clinical trials, licensing, and funding information. All of this stuff is based on more kinds of metadata and different uses, and more and more third parties are making use of it,” notes Geoffrey.

Crossref infrastructure is the engine behind many services and initiatives throughout the community. Chuck explains: “Whether it’s online editing systems or tools that help identify the research you publish, our infrastructure helps make it happen.”

Most Crossref services can be grouped into two broad categories—Metadata In and Metadata Out—both designed to improve research communications. “On the one hand we meet the direct interests and needs of our members. At the same time, we work with others who use Crossref metadata in the products and services they develop,” expands Ginny.

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Love metadata, love technology

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Almost every service that we’ve launched, every new functionality that we’ve added, is collecting and using another set of metadata.
Our broad and inclusive community may have different views, but when it comes to law and policy, Crossref remains impartial. Being impartial isn’t easy but at Crossref it’s mission critical. “Impartiality is an important part of serving the scholarly community worldwide,” says Lisa. “It isn’t the kind of thing that increases our revenues, but it does fulfill our mission.”

“We’re here to serve all our members—large and small, new and established,” reaffirms Ed. “Being impartial means that we are able to serve the entire scholarly community.” Similarly, Crossref metadata is open to everyone. “Crossref doesn’t make a judgment about the quality of content and we don’t verify publishing practices. It’s not our job and it wouldn’t really be good for the community because what if we got it wrong?” explains Ginny.

Crossref remains independent and financially sound. “No one is propping us up. We are really in it for the long term,” notes Ginny. “We need a solution for the attribution of scholarly research—who did what work, where, and thanks to whom. We want to be an organization that the whole community can still rely on in 20 years and beyond.”

Financially, Crossref is in very good shape. “Because we have a reserve fund, and we’re investing prudently, we’re in a position to do things that we weren’t able to do in the past,” explains Lisa.

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We are obsessed with persistence - of links, of our technology, and of the organization. Membership and service fees cover our costs, and our surplus means we can do new things and sustain the community infrastructure for the long term.

From an operational perspective, Crossref is constantly looking for opportunities to reduce overhead. “We use low cost cloud-based accounting and CRM systems and we’re in the middle of changing banks, which will be a saving of $40,000 a year in incoming wire fees alone,” reports Lisa. “We want to lower the barriers to membership. We have programs that waive the deposit fees for some members from low-income countries, and the Sponsoring Affiliate program means that many small members don’t have to pay a separate membership fee. Now we’re looking to formalize our approach to low to middle income countries and establish fees in local currencies. Those are the models we’re looking at now,” says Lisa.
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“We are Crossref, a not-for-profit membership organization for scholarly publishing working to make content easy to find, link, cite, and assess.”

“I would love for our members to say, ‘I contribute to Crossref.’ I want everyone to feel that they have a stake in the organization,” says Ginny. “We want members to see that we’re listening to them and trying to improve things. We’ve four outreach managers now and that role wasn’t even a concept a year ago. We want to be proactive and invite people in.”

“We’ll keep banging the drum on persistent links and richer metadata,” says Ed, “as an infrastructure organization, Crossref may sometimes seem to recede into the background. However, a lot of thoughtful work takes place out in the open. We value transparency, and want to be held accountable to our ‘truths.’

“It’s not just that we register content with persistent identifiers but that we’re also building things on top to meet specific requirements for our members. In the past we conflated the DOI and Crossref but not all DOIs do the same things,” explains Jennifer. “Crossref adds value and has services beyond just resolving the identifier to the artifact, to the scholarly record.

We have a lot of services on top. And just because it has a DOI doesn’t mean that it’s Crossref’s.”

“It’s not going to be easy because some of our members are not aware of everything that Crossref offers. That’s where our ambassadors have an important role to play,” adds Lisa. “We have a lot of people who are travelling and doing more outreach than ever before and that’s a good thing. That’s the biggest challenge and the most exciting aspect of our growth. Meeting more members on the ground.”

“A change in how we report journal titles lowered journal count. 2009 2015

Content Types (October ‘16)
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**Board Members**

- **Chair**: Bernard Rouse
- **Treasurer**: Gerry Grenier
- **Secretary**: Lisa Hart Martin
- **Executive Director/Assistant Secretary**: Ed Pentz

**Crossref staff**

- **Amy Bosworth**: Assistant Accounts Receivable Manager
- **Andrew Gilmartin**: Senior Software Developer
- **Anna Tołwinski**: Member & Community Outreach Manager
- **April Ondis**: Marketing Manager
- **Chuck Koscher**: Director of Technology
- **Ed Pentz**: Executive Director
- **Geoffrey Bilder**: Director of Strategic Initiatives
- **Ginny Hendricks**: Director of Member and Community Outreach
- **Jennifer Kemp**: Member & Community Outreach Manager
- **Jennifer Lin**: Director of Product Management
- **Joe Wuss**: R&D Programmer
- **Jon Stark**: Software Developer
- **Karl Ward**: Principal R&D Engineer
- **Kirsty Meldings**: Product Manager
- **Larisa Osmanaj**: Senior Staff Accountant
- **Lindsay Russell**: Assistant Human Resources Manager
- **Lisa Hart Martin**: Director of Finance and Operations
- **Madeleine Watson**: Product Manager
- **Maria Sullivan**: Staff Accountant
- **Mike Yalter**: Software Developer
- **Patricia Feeley**: Product Support Manager
- **Paula Dwyer**: Controller
- **Rachael Lammey**: Member & Community Outreach Manager
- **Rakesh Masih**: UX/UI Designer
- **Rosa Clark**: Marketing Coordinator
- **Shauna Lee**: Office Manager
- **Shayn Smidyen**: Product Support Associate
- **Susan Collins**: Member & Community Outreach Manager
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