

Getting It Together

Advancing Technology Through Collaboration

Bill Kasdorf

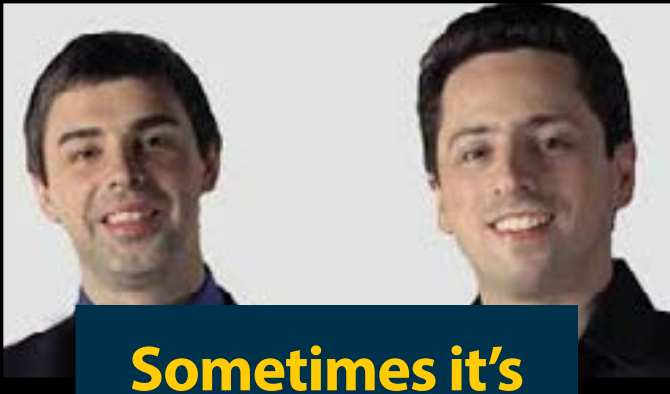
Principal, Kasdorf & Associates, LLC

Founding Partner, Publishing Technology Partners




**Society owes a lot
to individual geniuses.**





**Sometimes it's
dynamic duos.**



A top-down view of eight hands of various skin tones reaching in from the edges of the frame to hold a glowing lightbulb in the center. The hands are positioned around a dark blue rectangular box containing text. The background is a light, neutral gradient.

**Often today, it's
collaboration.**



Collaboration between organizations.

Collaboration between organizations.

Collaboration between sectors.

Collaboration between organizations.

Collaboration between sectors.

Collaboration between stakeholders:

Collaboration between organizations.

Collaboration between sectors.

Collaboration between stakeholders:

- *Publishers*

Collaboration between organizations.

Collaboration between sectors.

Collaboration between stakeholders:

- *Publishers*
 - *Librarians*

Collaboration between organizations.

Collaboration between sectors.

Collaboration between stakeholders:

- *Publishers*
 - *Librarians*
 - *Researchers*

Collaboration between organizations.

Collaboration between sectors.

Collaboration between stakeholders:

- *Publishers*
 - *Librarians*
 - *Researchers*
 - *Funders*

Collaboration between organizations.

Collaboration between sectors.

Collaboration between stakeholders:

- *Publishers*
 - *Librarians*
 - *Researchers*
 - *Funders*
 - *Technologists*

Collaboration between organizations.

Collaboration between sectors.

Collaboration between stakeholders:

- *Publishers*
 - *Librarians*
 - *Researchers*
 - *Funders*
 - *Technologists*
 - *Standards organizations*

Collaboration between organizations.

Collaboration between sectors.

Collaboration between stakeholders:

- *Publishers*
 - *Librarians*
 - *Researchers*
 - *Funders*
 - *Technologists*
 - *Standards organizations*
 - *Etc.*

Even between
**otherwise
fierce
competitors.**





**Wait a minute.
This is not a new thing.**

Umm . . . Crossref?

True. Crossref is
a great example.
CHORUS is too.

But there has
been a striking
amount of this
activity in the
past few years.



Crossref



CHORUS

There's a wide variety of approaches.

- **Get a broad constituency involved early on.**

There's a wide variety of approaches.

- **Get a broad constituency involved early on.**
- **Key players develop the solution and then attract other participants.**

There's a wide variety of approaches.

- Get a broad constituency involved early on.
- Key players develop the solution and then attract other participants.
- **Single player attracts related organizations to collaborate on developing the solution.**

There's a wide variety of approaches.

- Get a broad constituency involved early on.
- Key players develop the solution and then attract other participants.
- Single player attracts related organizations to collaborate on developing the solution.
- **Some are “massive multiplayer” initiatives.**

There's a wide variety of approaches.

- Get a broad constituency involved early on.
- Key players develop the solution and then attract other participants.
- Single player attracts related organizations to collaborate on developing the solution.
- Some are “massive multiplayer” initiatives.
- **Some of these overlap or intersect.**

The common theme is collaboration.

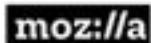
- *No single player owns the solution.*
- *Open source dominates.*
- *Best practices are often part of the picture.*
- *They all come from a recognition that a solution must involve multiple stakeholders.*
- *They are virtually all non-commercial.*
- *Commercial organizations commonly participate.*



WARNING!

Logo storm ahead!
(Logorrhea?)

JROST: Joint Roadmap for Open Scholarly Tools



[There are many more organizations that have come on board since I stole this slide from Dan Whaley.]

JROST is working toward an infrastructure of interoperable, open source tools for scholars.

- *Participants all work in that space, committed to open source and typically non-profits.*
- *Creating a roadmap for how existing projects can come together.*
- *Building an infrastructure for scholarly production, publishing, dissemination, and collaboration.*
- *Began in April; first workshop (58 orgs) in Sept.*

JROST is also a participant in yet another collaborative initiative:

Invest in Open Infrastructure

Working to jointly develop funding.

Participants include JROST, OPERAS, Open Research Funders Group (ORFG), Scholarly Commons, SPARC Europe and SPARC US.

*(These organizations are “birds of a feather” sharing a **common vision & mission**, not competitors.)*

Metadata 2020

This region intentionally left blank.
*[Too many participants
to show the logos!]*

The Metadata 2020 mission:
To improve the quality of metadata for research.

“Metadata 2020 is a collaboration that advocates richer, connected, and reusable, open metadata for all research outputs, which will advance scholarly pursuits for the benefit of society.”

Six Metadata 2020 Community Groups

- *Publishers*
- *Librarians*
- *Service Providers / Platforms and Tools*
- *Data Publishers and Repositories*
- *Researchers*
- *Funders*

Meet quarterly to develop problem statements, outlining challenges & opportunities.

*Six themes emerged, which led to **Projects**.*

Current Metadata 2020 Projects

- 1. Researcher Communications*
 - 2. Metadata Recommendations & Element Mappings*
 - 3. Defining the Terms We Use About Metadata*
 - 4. Incentives for Improving Metadata Quality*
 - 5. Shared Best Practices and Principles*
 - 6. Metadata Evaluation and Guidance*
- Meet monthly and are making concrete progress.*

*"This is a social movement.
We don't want to be the metadata police."
—Howard Ratner*

**This comment is true of
many of these initiatives.**

*The spirit is collaborating
to get everybody on the same page.*

*Underlying assumption:
**Interoperability & sharing work to make it work
are good things.***

Scholix: A Framework for Scholarly Link eXchange

Scholix is supported by the following organizations:



"An evolving lightweight set of guidelines to increase interoperability."

Scholix is a **collaboration** between **publishers, data centers, and service providers** to develop:

- *Consensus* on how to improve exchange of data-literature link information
- *Information model* for a Scholix scholarly link
- *Link metadata schema* for a Scholix scholarly link
- *Options for exchange protocols*

Scholix is a “wholesaler to wholesaler” exchange framework between hubs or aggregators of data-literature links.

Current Hubs:

- *Crossref*
- *DataCite*
- *OpenAire*

Current Implementors:

- *EuropePMC*
- *Dryad*
- *Scopus*

Blockchain for Peer Review

An example of a small group of collaborators creating a solution that a broad range of participants are expected (hoped!) to join.

Phase 1 Participants



SPRINGER NATURE



ORCID



Blockchain

- Based on *transactions*: a “*distributed registry*”
- *Not* a cryptocurrency, but can use one to facilitate *micropayments*
- Has *no central owner or curator*
- Facilitates exchange of *trusted information*
- Provides “*smart contracts*”
- Can *manage access, protect information & identities*

Blockchain

*“Blockchain is a technology for **decentralized, self-regulating data** which can be managed and organized in a revolutionary new way: **open, permanent, verified and shared**, without the need of a central authority.” —Joris van Rossum^{*}*

**Thanks to Alice Meadows’ interview with Joris van Rossum, Digital Science, and Martijn Roelandse, Springer Nature, in the April 3, 2018 Scholarly Kitchen, for the quotes in this section.*

Blockchain for Peer Review

- Aims to create *“a fairer and more transparent ecosystem for peer review”*
- Participants from a broad range of publishers and journals will *deposit peer review activity*
- That information can be *partially or fully encrypted*
- Activity will *update the reviewer’s ORCID profile*
- *Other applications* can be built on this, e.g. tracking review activity across all journals and reviewers.

Anti Double Dipping Alliance

*An example of a single organization
initiating an idea and forming a collaboration
among relevant partners.*



Anti-Double Dipping Alliance for transparency in Open Access book publishing

Problem addressed:

Unwanted acquisition of duplicate titles from different sources and systems.

Current participants:

- *Delbanco*
- *Dietmar Dreier*
- *JSTOR*
- *Knowledge Unlatched*
- *LM Information Delivery*
- *LYRISIS*
- *Missing Link*
- *OAPEN*
- *Project Muse*

Coko Foundation

*An example of a developer
driving collaboration for the common good.*



**Collaborative
Knowledge
Foundation**

Coko develops stuff to give away.

- *Building an open infrastructure for publishing*
- *Modular, open source components*
- *Designed to “plug & play” with other components*
- *Assembles and adapts to address specific needs*
- *Their “customers” are collaborators*
- *Building a community*

PubSweet

*Editorial, production,
& content management
for scholarly monographs*

xPub

*Manuscript submission
and peer review
platform*

Current Partners:

- *U. California Press*
- *Calif. Digital Library*
- *Michigan Publishing*
- *Fulcrum*
- *Longleaf*
- *UNC Press*
- *American Theological Library Association*
- *eLife*
- *Europe PMC*
- *Hindawi*
- *Caltech*
- *Wormbase*
- *UTS ePress*

eLife

*An example of a publisher
driving collaboration for the common good.*



eLIFE

eLife: An example of multiple collaborations

Partnering with Coko (and Coko's partners) to develop xPub MS submission & peer review platform

Originally developed open source Libero publishing platform for hosting and "continuous publishing"

Now community-based Libero development with Coko, Hindawi, and Digerati

Software governance uses "benevolent dictatorship" model: eLife as project lead.

RA21: Resource Access for the 21st Century

*An example of two membership associations,
STM and NISO, collaborating.*

(This is getting meta!)



RA21: Moving beyond IP-recognition for authentication

- Goal: *“Simple, Trusted Access—Anywhere, Anytime, on Any Device”*
- Involves, and focuses on, *researchers, publishers, vendors, and customers*
- *Not building a technical solution or platform; expects a “diverse approach” to be needed*
- Really a *“best practices”* initiative

Many organizations are involved:

- *Am. Chemical Society*
- *American University*
- *Brill*
- *Brown University*
- *Carnegie Mellon Univ.*
- *Copyright Clearance Ctr.*
- *EBSCO*
- *Elsevier*
- *GSK (GlaxoSmithKline)*
- *IEEE*
- *InCommon*
- *Informed Strategies*
- *Jisc*
- *LibLynx*
- *MIT*
- *OCLC*
- *Open Athens*
- *ProQuest*
- *Springer Nature*
- *SUNet*
- *Univ. of Bath*
- *UC Davis*
- *Wiley*
- *Wolters Kluwer*

Readium

*Yes, a collaboration!
Not IDPF, not W3C: Readium.*



Readium

Many organizations are involved in Radium:

Access for All

Actialuna

AM Consulting (DITA)

American Printing House for the Blind

Benetech

Bibliovault

Blackwell

Bluefire Productions

Bokbasen

Brooklyn Public Library

CSA Group

DAISY Consortium

Datalogics

De Marque

Digital Public Library of America

Dilicom

Disney Publishing Worldwide

Eden Livre

Ellibs

ePagine

Evident Point

Feedbacks

Fingerprint Digital

Google

Houghton Mifflin Harcourt

Hypothes.is

Immanens

Ingram Content Group / Vital Source

Kivuto Solutions

Learning Ally

Libri Italiani Accessibili

New York Public Library

Nook Digital

Nord Compo

ProQuest

Ravn Webveveriet

Sony

The Ebook Alternative

Yahoo Japan

Youbox

Radium has become a set of SDKs

*Original implementations for browsers and devices are widely used, but are **now in maintenance mode**.*

The new SDKs are:

- *based on a common architecture*
- *optimized for their respective platform*
- *easier to grasp for developers*
- *support Radium LCP DRM (except Web version)*

Radium Chrome app is being replaced by an open-source app based on Radium Desktop SDK.

*And to conclude, one more logo storm
from an initiative with
7,580 members from 137 countries
and with 95 working groups
and interest groups:
RDA, the Research Data Alliance.*

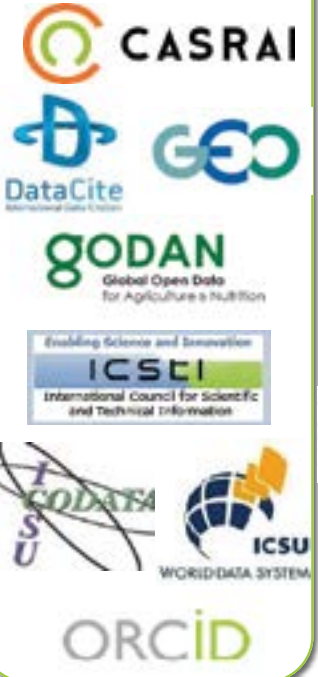
*(The following logos are just
the organizational and affiliate members.)*



RDA Organisational & Affiliate Members

48 Organisational Members

8 Affiliate Members



Thanks!

Bill Kasdorf

kasdorf.bill@gmail.com

<http://pubtechpartners.com>

+1 734-904-6252

@BillKasdorf