



Institutional Mobilization Task Group (IMTG) Final Report

May 2016

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1. Executive Summary

Access to scholarly research is key to Canada's success globally. The current commercial publishing model is placing that access at risk. The Institutional Mobilization Task Group (IMTG) had a mandate to develop resources that describe the challenges posed by the existing academic publishing model, and provide practical solutions that might be undertaken by various university constituencies. CRKN member libraries will play a critical role in facilitating dialogue on Canadian university campuses.

The goal of the IMTG is to encourage a united front within the academic community to facilitate a strong and coordinated negotiating stance on the part of Canadian library consortia, to influence the publishing landscape, and to create a more sustainable model of access to research content for Canadian researchers.

The transformative effects of digital scholarly publishing has created new opportunities for publishers and the academy alike. For universities, electronic library acquisitions¹ are now increasingly based on a leased-access model; over the past two decades, electronic content licensing (and advent of the so-called 'big deal') has democratized access to published research in Canada, to the tremendous benefit of the academic community.

During that same period, publisher competition and consolidation has seen the five largest commercial publishers controlling the majority of globally published research content. These publishers are each able to use their oligopoly to reliably earn excessive profits by publishing the results of predominantly publically funded research, utilizing the freely provided labour of faculty who serve as journal editors and peer reviewers.

Under this model, universities must pay ever increasing fees to access content to support their researchers, while researchers are often incited to publish in, and engage with, the largest commercial publishers. The system reinforces the market power of the largest publishers, allowing them to appropriate a larger and larger share of library budgets in Canada and internationally, displacing other content and activities. This situation is not sustainable. The impacts, while universal, will most adversely affect smaller institutions with more restricted acquisitions budgets possibly returning academic libraries to the disparity of access which pre-dated the 'big deal' and Canada's highly effective consortial arrangements.

Through highlighting the strides made in Canada to democratize access to research content in the face of evolving technological and industry pressures, academic librarians can engage with the broader academic community (especially researchers and administrators) to promote informed publishing choices which value and preserve public investment in research. This engagement will include development of an understanding amongst individual researchers, faculty, and students of the implications of their decisions on where and how they publish and where they volunteer time and effort for peer-review and editorial work.

In order to develop a more sustainable scholarly production model, academic libraries need the support and leverage of the collective power of the Canadian university community. The task group aims to advance the issue both on campuses and with allied organizations in Canada and internationally and focus attention on opportunities to regain control of scholarly production.

¹ In this document, library acquisitions refers to both content which is purchased outright, and content which is acquired by some type of leasing arrangement. In some cases, content is purchased, by access is leased.

2. Introduction

2.1. Mandate

The objective of the Institutional Mobilization Task Group (IMTG) is to develop materials for members to utilize in communications with their internal stakeholders on the issues of negotiation priorities and to develop a communications campaign to raise awareness and support on a national level within and beyond the university. The Terms of Reference are included in Appendix A.

2.2. Background and formation

The genesis of the IMTG was a member resolution proposed at CRKN's 2014 Annual General Meeting in Calgary that called for a hard cap on negotiated price increases, explicitly directing CRKN to walk away from agreements with proposed increases higher than the cap. An amendment to the resolution, proposing to first provide members tools to educate the broader academic community in order to garner full institutional support for such action, was passed. The IMTG was created by the adoption of its Terms of Reference by the CRKN Board in January, 2015.

3. Methodology

3.1 Overview

The group was established by the CRKN Board of Directors in February 2015 with the following membership:

- Annie Bélanger, Associate University Librarian, University of Waterloo
- Jean Blackburn, Collections Librarian, Vancouver Island University
- Dr. Constance Crompton, Assistant Professor, Digital Humanities, UBC Okanagan
- Richard Dumont, University Librarian, Université de Montréal
- Dr. Karen Grant, Provost and Vice-President, Academic & Research, Mount Allison University (Chair)
- Dr. Joy Johnson, Vice-President, Research, Simon Fraser University
- Dr. Jennifer Love, Associate Professor, University of British Columbia
- Jennifer Sowa, Manager, Communications and Marketing, Libraries and Cultural Resources, University of Calgary
- Ken Blonski, Kimberly Silk, Monica Ward and Clare Appavoo provided primary support services to the group.

The group met five times (once in person, and via four teleconferences), while engaging in discussions electronically, in preparation for member consultation and feedback at the CRKN AGM in October, 2015. Following the AGM, the group met several more times while finalizing the toolkit, and developing additional resources for outreach to the broader campus community.

3.2 Toolkit Development

The group directed staff to develop a series of short, informative documents that could be used on campuses to describe the many facets of the issue, and to form the basis of conversations with a variety of constituencies, both on individual campuses and at a regional and national level. The goal was to provide resources that might be used and refined by academic librarians in conversations with researchers and administration.

Staff began work on the toolkit in the summer of 2015, shared a draft version of some of the tools during a member teleconference and in individual discussions with members, and posted a more complete set of tools on the CRKN website in time for consideration at the 2015 AGM.

Based on feedback received from the membership and from the IMTG itself, CRKN worked to add consistent visual elements and images and to finalize translations. The toolkit was formally launched on the CRKN website in January 2016. In particular, CRKN offered to make the source documents available to members should they wish to rebrand or repurpose the information on their own campus. As of May 2016, the following usage statistics have been gathered for the toolkit:

IM Toolkit (English)	IM Toolkit (French)
23,409 page views	2,108 page views
49.9% returning visitors, 50.1% new	39% returning visitors, 61% new
2,327 PDFs downloaded	455 PDFs downloaded
74% of sessions from Canada, 10% from Russia, 7% from US, 1% from UK; also from Brazil, China, Kyrgyzstan, India, Australia, and Kenya	86% of sessions from Canada, 6.5% from France, 2% from US, 1% from Belgium; also from Senegal, Morocco, Tunisia, Switzerland, UK, and French Guiana

(Statistics as of May 13, 2016)

CRKN staff have invited a group of academic librarians working at CRKN member institutions to test the tools in practice, and to provide feedback on improving the toolkit. While informal feedback is being gathered currently, additional focus groups are being scheduled and the toolkit will be refreshed based on member reactions by September 2016.

3.3 Engagement and Outreach

On September 21, 2015, CRKN staff shared draft versions of the toolkit with 11 members via teleconference, and received additional feedback from a handful of members who were unable to attend. Very specific recommendations were received and incorporated on matters from distribution of the toolkit, the number of French sources referenced, the tone of the text, emphasis on different types of open access, utility of infographics, etc. These changes were incorporated in subsequent versions of the toolkit.

In October 2015, Karen Grant and Jean Blackburn provided an update on the IMTG at the CRKN AGM in Ottawa, and invited members to review the updated toolkit documents shared (but not publicized) on CRKN's website.

The CRKN toolkit was officially launched to the membership at the end of January, 2016. As mentioned earlier in this document, CRKN staff have identified a handful of members who are actively using the toolkit on their campuses, and are working to engage them in conversation to provide feedback on the toolkit. The results of that consultation – and anticipated focus groups – will be presented at the 2016 AGM.

3.4 Engagement with Other Consortia

CRKN staff have coordinated approaches with, and provided ongoing updates to, the Canadian Association of Research Libraries, and Canada's four regional library consortia (CAUL, BCI, OCUL, and COPPUL). An update on the work of the IMTG was presented by Clare Appavoo at International Coalition of Library Consortia (ICOLC) in April, 2016.

3.5 Engagement with Other National Organizations

The IMTG has suggested that an inquiry by the Council of Canadian Academies (CCA) into the true cost of the existing scholarly publishing model would be a valuable means to advance the work of the IMTG nationally, and to support the work of the tri-council agencies in promoting open access. CRKN is currently exploring the requirements to commission a CCA study through innovation, Science and Economic Development Canada (ISED) – ideally, in association with one or several of the tri-councils.

Regional and national meetings of university administrators have also been identified as vehicles for engaging various constituencies in the issues of the sustainability of the scholarly publishing model, and the work of the IMTG. For instance, Canadian Association of University Business Officers (CAUBO) hosts an annual meeting where the work of the IMTG might be shared with Vice-Presidents (Academic) and Vice-Presidents (Administration).

4. Issues Identified

4.1. Audience Identification

The IMTG identified three constituencies that required different approaches and messages:

- Academic librarians and library staff;
- University administrators; and
- University researchers (faculty and students).

To this point, students have not been identified or targeted specifically, and the IMTG has done little to segment messages within these groups. The IMTG toolkit was meant initially to provide a basis for librarians to engage in discussions with researchers and administrators, and to provide a starting point for subsequent approaches to other campus and stakeholder groups.

4.2. Evolution of Scholarly Publishing (Journal Pricing)

Print-based publications including scholarly journals have traditionally followed a very simple model in which costs were based on the number of subscriptions, with perhaps some small discounts for multiple titles from the same publisher. Individual universities negotiated and dealt with individual publishers, and maintained dedicated staff and shelf space to house collections. This had the effect of preventing all but the largest institutions from having the financial ability to subscribe to all available content. To counter this, university libraries often allowed visiting scholars to access their collections in person, and later, negotiated the ability to offer inter-library loans between institutions.

In the late 1990s and early 2000s, the move from print to digital publication meant that publishers were no longer restricted by the costs of physical distribution, and universities were not limited by the constraints of physical shelf space for additional collections. About this time, the notion of the 'big deal' emerged providing access to a publisher's entire collection for roughly the same price as the institutions' existing annual print subscription fees. With the 'big deal', library consortia had a new opportunity to pool the collective purchasing power of university libraries regionally and nationally to achieve better pricing for digital resources. While the content itself is often owned outright, this licensing arrangement represents a way to lease (rather than purchase) the access to that content, and creates a steady, predictable and captive revenue stream for publishers.

Impacts

As a result, institutions were able to leverage their collective purchasing power to offer more extensive library resources to researchers. In the Canadian context, this had the effect of significantly increasing and democratizing access to research content at the majority of Canadian universities. Many smaller universities were suddenly able to subscribe to this 'big deal' to offer library resources previously completely beyond their financial means. In part as a result of the move from print to digital distribution, Canadian universities have been able to reallocate portions of their budget that would otherwise have been spent on library acquisitions. Unfortunately, from 1994 to 2014 Canadian university library acquisitions budgets, dropped from a 2.5% to 1.5% as a proportion of university revenues (source: CAUBO).

The recent weakness of the Canadian dollar has brought renewed attention to the costs of electronic library resources – the bulk of which are purchased in US currency from

international publishers – but this does not alter the underlying issue: the current model of commercial publishing is simply not sustainable, and the cost of electronic resources are displacing other acquisitions on campus.

Successes: Greater Distribution of a Wider Range of Research

From the perspective of the researcher, student or academic, the work to increase the availability of digital resources has been transformative and has given rise to new technologies to mine, map, and link and share research content. Inter-disciplinary approaches to research have evolved with the availability of content from disparate fields which previously may have been inaccessible or at best hidden. To the end user of library resources, it might seem like the content acquisition problem has been solved.

Unresolved Challenges

For at least the last 15 years and since well before the start of CRKN, the market power and resultant profitability of large, commercial publishers has been a persistent concern of the international academic library community since that profitability has been developed through continued price increases for subscribers. While publishers have an important role to play in the academic process, and while CRKN has developed and continues to enjoy a good working relationship with upwards of 40 publishers on behalf of its Canadian university members, there remains a sense that some publishers are able to use monopolistic or oligopolistic behaviour to privatize the benefits of publically-funded research by carefully measuring and meting access to universities and consortia.

Critics of the academic publishing industry note that commercial publishers are as profitable as any sector in the world. Moreover, they continue to demand and extract (from Canada and elsewhere) price increases well in excess of increases in general inflation. This has created a disturbing trend where a larger and larger percentage of CRKN members' library budgets are needed to support these electronic resources, even as library budgets themselves are, at best, frozen but more commonly being reduced, and adversely affecting university libraries' capacity to purchase other materials.

The increasing cost of electronic journals (particularly STEM journals) is outpacing the capacity of library acquisitions budgets, forcing libraries to prioritize and rationalize their subscriptions spend and/or reduce monograph expenses. The nature, value and utility of electronic library resources – and the fact that bundling large collections together represents significant savings over purchasing selected content at list prices – makes it difficult for libraries to reduce expenditures in this area without discontinuing entire collections.

The situation is analogous to the current unbundling of cable channels facilitated by changes mandated by the CRTC in Canada. While pick-and-pay television packages promise consumers newfound flexibility, the reality is that for consumers to see any savings, they need to radically reduce the channels available to them, and limit or eliminate premium channels.

4.3. Canadian economic environment

Ken Snowdon, in his CAUBO commissioned report "Canada's Universities: Cost Pressures, Business Models And Financial Sustainability" (Snowdon 2015), described a 'Perfect Storm' of issues aligned against the financial sustainability of Canadian universities, including income constraints, demographics, pension obligations, deferred maintenance and structural deficits in both salaries and research.

In that report, he described how, since 2000-2001, as actual operating income has increased each year, income per weighted full-time equivalent student has stagnated and fallen when considered using a sector-specific Canadian Universities Price Index (CUPI). Moreover, this decrease was recorded almost entirely in the second half of the period under review, and before significant budget adjustments in Quebec (2012-13) and Alberta (2013-14), for instance.

Decreasing Library Budgets and Changing Business Models

Snowdon noted that as a percentage of 'administration and other' spending, library expenditures have dropped from about 5.8% to about 4.2% between 2000/01 and 2012/13 (with the difference diverted to fund other costs such as pensions). This reduction in library acquisitions funds as a proportion of total university revenues represents an annual difference of about \$100M (CAD) nationally, in 2013 dollars.

In both cases, he describes this situation as "an example where technology and co-operation among institutions has actually reduced 'costs' but maintained or enhanced quality."

Another example of a successful evolution of the business model in higher education is the role of the Library and specifically cost containment directly associated with technological innovation and collaborative partnerships. Library expenditures, as we will see later, have declined as a proportion of total expenditures yet there appears to be widespread agreement among librarians, faculty, and students that services and service levels have been enhanced. In the Library 'story' the shift in the 'business model' was directly due to the creative utilization of technology, a collaborative culture, the availability of significant new funding to leverage investment, commitment and demand from multiple stakeholders, and acknowledged widespread benefits.

At this stage, the consensus among Canadian libraries is that it is increasingly difficult to develop additional efficiencies, particularly in the face of well-organized, rapacious commercial publishers. There are no further areas to reduce expenditures so libraries are forced to cut journals and other content.

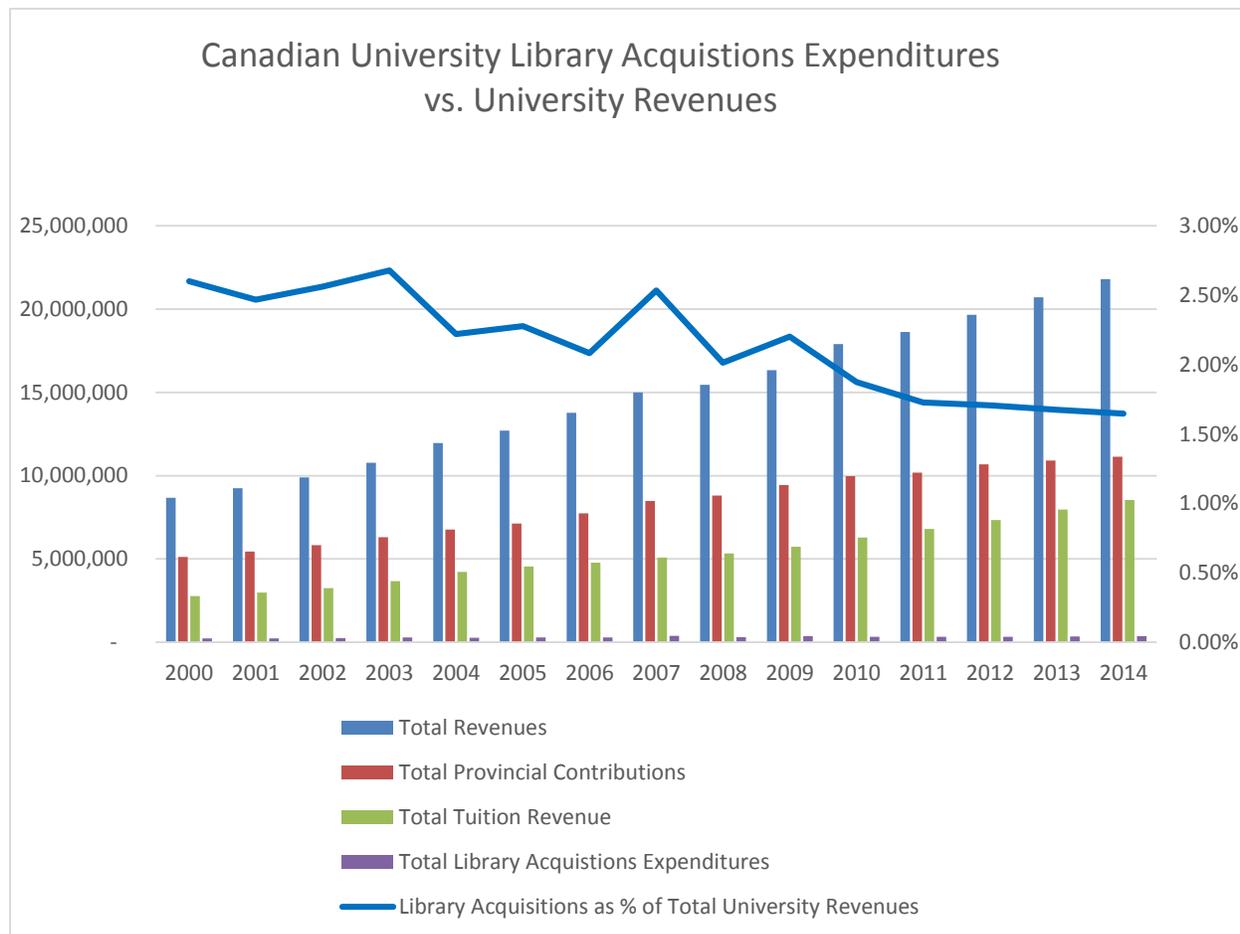
Proportion of University Revenues Devoted to Library Acquisitions

According to Statistics Canada and the Canadian Association of University Business Officers (CAUBO), Canadian university libraries expend some \$358M annually on library acquisitions (2013-14 Financial Information of Universities and Colleges [FIUC]). In Canada, CRKN manages roughly \$100M of that amount annually, through negotiating licenses for electronic research content.

Based on the annual FIUC survey, between 2000 and 2014, nominal (i.e., unadjusted for inflation) funding for library acquisitions has increased by an average of 4.04% annually. During this same time, total university revenues have increased at an average of 6.83%

annually (with component provincial grants increasing by 5.73%, and tuition and fees increasing by 8.39% annually).

As a result, the proportion of university expenditures spent on library acquisitions has decreased nearly every year from a high of 2.60% in 2000 to a low of 1.65% in 2014. Some of this reduction has been accomplished with and accommodated by new efficiencies. The library community has been exceptionally effective at collaborative action. The formation of the Canadian National Site Licensing Project (the forerunner to CRKN), funded in part by the Canada Foundation for Innovation, leveraged the advancement of research infrastructure in Canada and accelerated the transformation from print to electronic journals in an efficient and cost-effective manner.



Source: *Financial Information of Universities and Colleges, CAUBO, 2014*

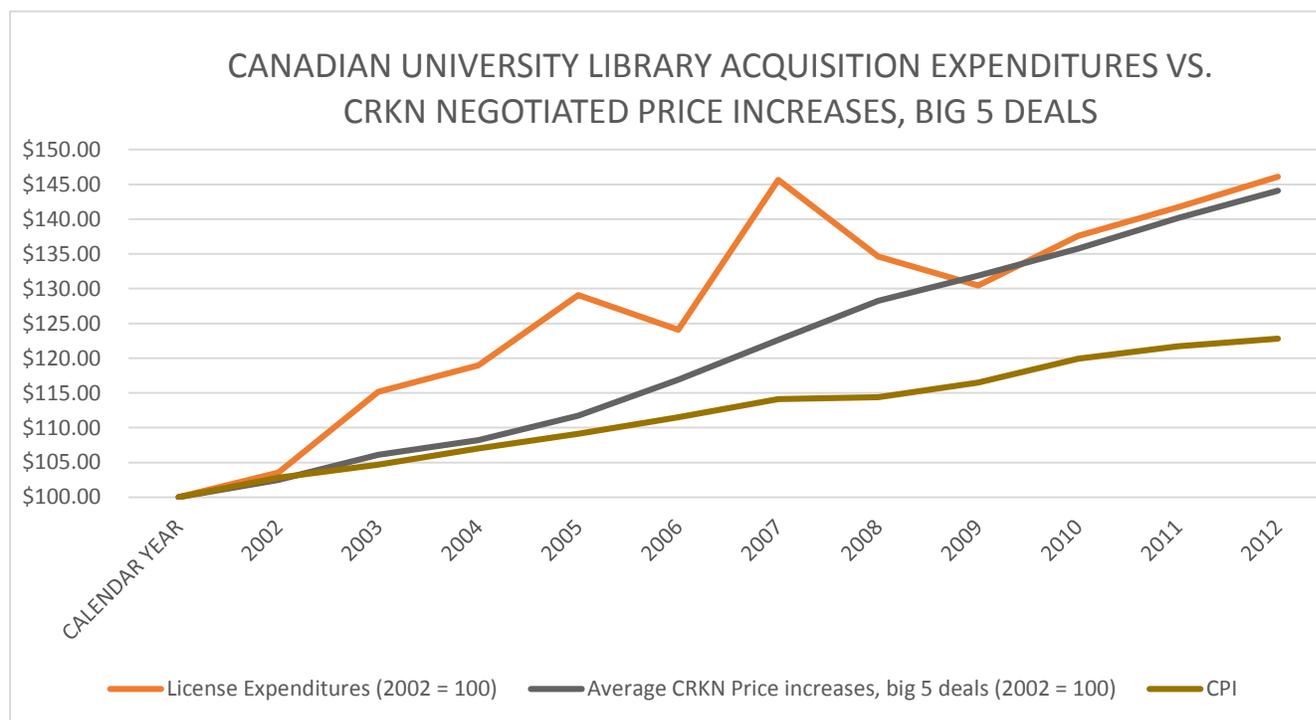
Recent pressures on Canadian universities, particularly related to pension obligations, deferred maintenance, and now flat or declining student enrolments complicate budgets and the resourcing of university libraries' acquisitions (Source: *Canada's Universities: Cost Pressures, Business Models & Financial Sustainability, CAUBO, June 2015*). As a result, university finances are growing increasingly constrained. For some institutions, this has resulted in a concentration of library acquisitions – with access to digital research (particularly STEM research) pushing out conventional expenditures like books, monographs, and increasingly, social sciences and humanities content.

Expectations of Researchers and Students

While the challenges of maintaining access to content mount on one hand, many users of electronic resources have grown accustomed to the access and discoverability that they enjoy. Thanks to advances in technology and with the support of their institution, students and researchers have a world of academic resources at their fingertips. Increasingly, this type of access is taken-for-granted and invisible to the end user. Changes to the model may well need to begin with an education of the end user – researchers in particular have no appetite to go back to more restricted access.

Average Annual E-Resource Increases

University libraries continue to be asked to do more with less, at a time when electronic resources continue to consume a greater and greater proportion of library budgets, to the exclusion of other content and activities. While the Canadian Consumer Price Index has averaged less than 2% annual increases over the past decade, the construction of a sector-specific inflation index shows that university revenues per weighted full-time enrolment actually declined by 7% from 2000 through 2012, with virtually all of the decline occurring between 2006 and 2012. In the face of economic realities on campuses, commercial publishers are routinely asking for annual subscription increases of between 3% and 5%, all the while relying on the volunteer labour of Canadian academics whose salaries and research funding is derived largely from public funds.



Source: CRKN license renewal data and Statistics Canada

4.4 Altmetrics and Impact Factors Overview

Scholarly metrics are a way for the impact of an article, author, or journal to be measured quantitatively. The scholarly community acknowledges that while these metrics are flawed, or exclude monograph production and some social sciences, they remain the primary way

impact is being measured in many fields. The most popular of these metrics – citation tracking, H-index and journal impact factors – are advanced and supported by one or several commercial publishers.

Since 1975, based on the support of Thomson Reuters and others, the impact factor calculation has gained popularity because it is a simple approach to measuring the significance of a journal. Today, the journal impact factor is considered such an important measure that some academic departments encourage their faculty to publish only in journals with high impact factors. While practices vary across the country, it is likely that funding, hiring, tenure and promotion decisions are influenced by how many articles a researcher has published in journals with the highest impact factors and the extent to which research is cited by others within a discipline or field.

While the founder of the impact factor (Eugene Garfield, Chairman Emeritus of Thomson ISI, now known as Thomson Reuters) maintained that citation studies should be normalized to take certain variables into account, such as citation density and rate of advancement of knowledge between disciplines, the raw impact factor remains a significant measure for faculty assessment in many science and some social science disciplines (Garfield 2006).

Criticism of Journal Impact Factors

As with any system, errors are possible. For instance, similarities in names between different authors or mistakes in spelling can result in citations being attributed to the wrong author. The importance of impact factors to the careers of academics and to the success of publishers create tremendous incentives to game the system. There have been instances where fraudulent reviews and collusion have artificially inflated impact factors. Ironically, a journal's impact factor can be increased when their research is cited for its mistakes

Some journals are designed to contain reviews as well as articles, and in some cases, a single issue with more reviews than original research may have a high impact factor if the reviews are themselves highly cited. Some publishers have deliberately designed new titles to include reviews, largely to increase citations. In addition, impact factors by design often exclude smaller, newer, and interdisciplinary journals. And the time frame that impact factors consider – arbitrarily 12 to 24 months after publication – often fails to capture the importance of the most significant research.

Other measures of scientific impact have been adopted, such as the usage factor that is promoted by the UK Serials Group and the Y factor, developed by Google. However, even these methods only measure citation counts in academic journals, and do not take into account other publications where journal articles have been cited. For instance, they do not measure the impact of discussion on social media of a piece of research or the impact research may have on public policy.

An Alternative: Altmetrics

Altmetrics (also known as cybermetrics or webometrics) are non-traditional metrics that are proposed as an alternative to traditional citation impact metrics. Altmetrics.org, the organization leading the Altmetrics movement, proposes to create new metrics that include social media activity, such as:

- Usage based on the number of downloads
- Peer-review when a scholar is considered to be an expert
- Citations using traditional methodologies
- Alt-metrics analyzing links, bookmarks and conversations

Work in this area is in the early stages. It will take time to develop valid and reliable methodologies for measuring the impact of social media in a community that is very traditional and slow to change. It will also be necessary to change the approaches to scholarly communication that are used by researchers especially given the hegemonic influence of the existing dominant regime.

As faculty at universities around the world go beyond the boundaries of the peer-reviewed journal to communicate their work, how the assessment of research impact must be adjusted.

4.5 Scholarly Publishing Models

Academic publishers have been instrumental in the dissemination of research, and publishers have worked hard to find efficiencies and promote discoverability. At the same time, the commercial nature and success of many publishers has at times irritated the academic community, particularly during times of budget shortfall. There is a sense that publishers are able to use their monopolies/oligopolies to earn excessive profits. This represents a real transfer of wealth from public to private hands while publishers continue to exploit researchers in terms of their editorial and peer review activities.

The open access movement arose partially to address the notion of excessive profits accruing to commercial publishers. While sometimes still a form of commercial publishing, open access often involves a redirection of payment for research content. Content is either made available by the author via an institutional or subject repository (green open access) or involves funding or payment at the outset of publication in order to provide gratis access to the end reader (gold open access).

In both cases, the research content is available to be used any number of times with no additional cost to the user. Open access content has sometimes been plagued by issues of discoverability, and by questions of the rigor used to assess the content, but it is an area that commercial publishers are increasingly embracing. In 2015, Canada's funding councils (CIHR, NSERC, SSHRC) mandated that grants awarded after May 1, 2015, would require recipients to ensure that any peer-reviewed journal publications arising from agency-supported research are freely accessible (i.e., open access or available through an institutional repository) within 12 months of publication.

4.6 Sustainability Challenges

The amount of research (and in particular, digital) content available to university researchers in Canada and elsewhere is unprecedented and growing. A growing variety of discovery tools (e.g., Google Scholar) and research technologies (e.g., text and data mining) have flourished, giving rise to connections between disparate disciplines and creating new areas of study. The amount of research available to and used by Canadian researchers has never been higher on account of digital technologies.

Although there has been a great deal of success to date with regard to increased access, the commercial publishing model that underlies much of the system is not sustainable and is threatening long-term access to research. To the extent that commercial publishers are able to control access to research content, they are able to act as gatekeepers to the forefront of a given field of study. The current system has a profound impact on how research is disseminated, and how research is accessed.

Challenge: Oligopoly of Commercial Publishers

Consortial negotiation by CRKN and others has benefited Canadian universities by democratizing access to research content, decreasing overall costs, and enabling smaller institutions access to resources they might not be able to afford otherwise. These gains have often been won by the adoption of the 'big deal'.

The digital age and the advent of the 'big deal' has drastically changed the publishing landscape, enabling publishers of scholarly research to make titles available at the push of a button. While this has increased the amount of content available to researchers and students, the 'big deal' has also empowered large, profitable STEM publishers (and encouraged consolidation in the marketplace), effectively crowding out spending on other resources like specialized content or monographs. Moreover, while these deals initially offered deep discounts which helped to foster wide adoption, subscription fees are increasing at rates outpacing inflation and causing tremendous burdens to university budgets. Furthermore, the nature of these large packages makes it difficult for libraries to reduce their spending, as the per-title prices, when subscribed to outside of a 'big deal', are similar in price to the costs when a university subscribes to the entire package.

One challenge inherent in the 'big deal' has been the maintenance of a system of pricing based on prior print spending, figures that are over 15 years old for most universities. This has meant that the adoption of the 'big deal' has come at very little comparative cost to institutions with smaller library holdings historically, creating a tremendous boost to smaller institutions in Canada. This has not gone unnoticed by large and small universities alike. If the system unravels, it would send Canada backwards. All universities will be affected should this occur, but smaller institutions would be very significantly affected. In other words, only the larger schools would potentially be able to afford to retain a significant number of titles on a one-off basis.

The problem is a unique one in the sense that both the source and the market for much of the scholarly content provided by large commercial publishers are research universities. Academics remain incented to provide their research and editorial services to the publishers. For their part, the publishers exact library subscription revenues while providing little or no compensation to academics' host institutions.

Challenge: Promotion & Tenure Criteria

The majority of promotion and tenure decisions in Canada rely in some fashion on prestige and impact factors of publications. Impact factors in particular have been designed and advanced by the commercial publishers, and by their very nature do not favour new publications. This not only solidifies the market position of the largest publishers, but stifles innovation in journal titles, research topics, methods and funding.

What is required is less a change in promotion and tenure criteria, and more a change in the underlying culture of evaluating research in the academy.

Challenge: Awareness of Publishing Alternatives

Researchers, administrators, and librarians continue to have alternatives to large commercial publishers, although they are not always well understood or easy to access. For instance, faculty may not understand copyright surrounding their work, or how to negotiate for better author rights when their work is published. Researchers may be reluctant to look for alternative publications if their career prospects are only enhanced by being published in

select journals. Not every institution has a repository of institutional research which is open access and easily discoverable.

While strides have been taken with a number of open access initiatives, there continues to be a sense that open access content is free. While the researcher or academic accessing the content does not pay under open access, the content still needs to be financially supported. Open access remains an alternative publishing business model, and not a publishing model divorced from business.

Challenge: Democratization of Knowledge

Scholarly research is a public investment, and preserving access to this research should be a public goal. The Tri-Agency Open Access Policy notes that its objective is to "improve access to the results of agency-funded research, and to increase the dissemination and exchange of research results."

Access to the latest research is essential for innovation and the advancement of society, is central to the teaching and research missions of academic institutions, and is essential for Canada to remain competitive on the world stage.

Challenge: Focused vs. Divergent Approaches to Publishing

The largest commercial publishers are extremely well-funded, and are working on many fronts to increase both the value and the visibility of their platforms and content. Publishers work to acquire additional content (and competitors), develop their hosting platforms, review and modify licensing terms and promote their services, both to librarians and administrators, and directly to researchers. Publishers, in many cases, also enable and orchestrate specific fields of study by providing structure to a community of researchers. Meanwhile, researchers and academics are both enabled and ensnared by the work of commercial publishers – and lack the concerted effort and organized focus to push back in a meaningful way. In many cases, disparate parts of a university campus – individual researchers, university librarians, and the research office – may be dealing with commercial publishers in isolation from each other.

Summary

The 'brave new world' of scholarly communications is based on the interconnectedness of a variety of challenges, and the necessity of considering and undertaking a number of approaches simultaneously to make any headway. An enlightened community is a necessary precursor to any cultural change. Consider how Canada has embraced curbside recycling and rejected smoking in public places over a generation. Our community needs to be engaged, informed and incented to think globally and to act locally on issues affecting scholarly publishing.

5. Outcomes

CRKN has published the IMTG toolkit on its website, and is monitoring both the web traffic received by the toolkit, as well as the ways in which the toolkit is being used on campuses. CRKN has circulated a letter to Canadian University presidents, encouraging them to take action on their campuses and collectively, to advance the goals of the IMTG. CRKN has also produced a PowerPoint presentation, designed to be repurposed on campuses for various audiences, to communicate issues and provide suggested remedies.

CRKN is also in discussions with SSHRC to propose an expert panel to the Council of Canadian Academies on the diversion of public funds by for-profit publishers in Canada. In particular, CRKN is considering commissioning a literature review of existing work in this area in Canada and internationally to support the work of an expert panel.

6. Recommendations and Messages

The Work of the IMTG has led to the following broad recommendations direction at specific audiences:

- **Educate:**
 - CRKN members utilize toolkit to engage other constituencies on campus to communicate how the individual actions of faculty (purchasing decisions, publishing decisions, promotion and tenure decisions) contributes to the power that commercial publishers have to set prices. Various institutional constituents need to be aware of downstream effects (think globally, act locally) (Toolkit)
 - CRKN to advocate for support from Executive Heads and other administrators through their member organizations (e.g. Universities Canada, CAUBO, etc.)
 - CRKN to develop targeted resources for provosts and VPRs
 - CRKN members to consider alternative publishing models and – to the extent afforded by existing collective bargaining agreements, consider support to non-traditional publishing activities in promotion & tenure criteria.

- **Gather Evidence:**
 - CRKN to explore commissioning a CCA study to identify the true costs of the current academic publishing model including the value of researcher services provided for free to large commercial publishers (such as editorial and peer review services) which are funded by Canadian tax-dollars.
 - Should it be determined that there is insufficient primary research for CCA to study utilizing their methodology, CRKN to explore opportunities for gathering the data including a possible secondment research study.
 - CRKN to leverage evidence-based research already underway in other CRKN activities to advance understanding of journal usage and scholarly communications model.

- **Collaborate:**
 - CRKN to collaborate with CARL, regional consortia and other organizations to develop regional, national and international approaches to current scholarly communications systems.
 - CRKN to share successes and best practices in changing scholarly communications model – both at and among its members, and internationally
 - CRKN members to advocate for alternatives to existing promotion & tenure criteria
 - Strengthen relationship between librarians and other constituencies on campus, including promoting the role of library in addressing scholarly communications issues

- **Prioritize:**
 - Librarians, administrators and researchers must work together to identify which research content is most valuable on university campuses.
 - In the short term, members may need to look for alternatives in a proactive manner, including considering extending research led by Vincent Larivière nationally, and related work by CRKN in journal value analytics.

6.1 Commercial Publishers Increasing Power and Effects on Subscription Fees

Researchers:

- Exercise author rights;
- Explore alternate publishing models; and
- Leverage their influence with their scholarly societies.

Administrators:

- Consider collaborating nationally with libraries to influence pricing.

Everyone

- Engage all of our various constituencies in dialogue and discussion to leverage Canada's collective purchasing power in response to large commercial publishers so that we too may influence the market.

6.2 Promotion & Tenure Criteria

Researchers:

- Explore alternative (or additional) criteria for establishing promotion and tenure; and
- Encourage more experienced faculty to take leadership in this regard.

Administrators:

- Elevate deposit of documents into institutional repositories as part of P&T criteria; and
- Consider using a more comprehensive set of measures to assess performance.

6.3 Lack of Understanding of Publishing Alternatives

Researchers:

- Enter into dialogue with your library regarding alternative publishing models; and
- Encourage and support junior faculty who are developing scholarship in new ways.

Administrators:

- Explore and understand the impact of alternate publishing models.

6.4 Democratization of Knowledge

Broader audiences:

- Scholarly research is a public investment, and preserving access to this research should be a public goal.
- Access to the latest research is essential for innovation and the advancement of society, is central to the teaching and research missions of academic institutions, and is essential for Canada to remain competitive on the world stage.
- There is a tension between public good and private benefit in the academic publishing sphere; the current publishing model is unsustainable and jeopardizes access to scholarly research.
- Successful initiatives in Canada and elsewhere that might be extended or imitated should be celebrated and shared. CRKN's IDSE project may have a role to play in advancing the work of the IMTG.
- Monitor work internationally on the sustainability of academic publishing models, and share best international practices in Canada.

7. Conclusion / Future Work / Next Steps

The current scholarly publishing system has evolved based on the sum of the forces that have been applied against it. In many cases, the unintentional consequences of rational individuals (publishers, researchers, investors, administrators, etc.) have transferred more and more control over research content – and public funds – to for-profit publishers. If this situation is to be properly addressed, it will require the conscious, coordinated action of many players at all levels of the academic research enterprise to find new ways of advancing research in a measured and sustainable way.

8. Appendices

- A. Terms of Reference
- B. IMTG FAQ
- C. Works Cited

Appendix A: Terms of Reference

Institutional Mobilization Task Group (IMTG) Terms of Reference Objective, Goals, and Mode of Operation Approved: CRKN Board of Directors, February 2, 2015

Objective:

The objective of the Institutional Mobilization Task Group (IMTG) is develop materials for members to utilize in communications with their internal stakeholders on the issues of negotiation priorities and to develop a communications campaign to raise awareness and support on a national level within and beyond the university.

The formation of this task group follows from two key action items contained in a Member Resolution passed at the 2014 Annual Meeting of the Members:

- 1) Provide background materials to members on the current licensing environment and economic challenges, for members to utilize in internal engagement on these issues; and,
- 2) Prepare a communication campaign to address the Canadian and International University community, granting agencies and government on strategy for addressing these issues and the potential impact, to be ready for approval by the members at the 2015 AGM

The goal is to reinforce CRKN's negotiating position by galvanizing support from member campuses.

Goals:

The stated goals of the Institutional Mobilization Task Group are:

1. To gather data regarding the depth and breadth of the economic challenges facing CRKN members through member consultation;
2. To gather data illustrating the reality of steadily increasing journals costs, regardless of the positive impact of consortial negotiation, through CRKN recent negotiation history for CRKN's largest licenses and through ICOLC battlefield surveys;
3. To summarize recent developments in the Canadian and International licensing environment, including the evolution of the 'Big Deal' and its impact;
4. To consult with regional consortia to validate and augment a perspective on licensing challenges nationally;
5. To develop a list of issues in the scholarly communications environment that contribute to or compound the lack of sustainability of the existing journal pricing model. E.g. Promotion & Tenure criteria leading to the ongoing development of new journals, potentially with poor value content.
6. Using a summary of the evidence and data gathered, develop a common message that CRKN members may share with other Stakeholders within their own institutions;
7. To develop a communications campaign, identifying key stakeholder organizations such as University Presidents through AUCC/SACUR, developing the approach, and message and articulating the anticipated resourcing and intended effect.
8. To make specific recommendations to CRKN's Board of Directors regarding this plan that can then be shared with members at the 2015 AGM.

Membership:

- One (1) current or former member of the Board;

- Two (2) individuals drawn from CRKN's member institutions with electronic licensing, content development and/or liaison librarian experience and where possible, chosen candidates will reflect the diversity of CRKN membership (small, medium, and large institutions);
- One (1) or Two (2) individuals drawn from CRKN's member institutions with the perspective of the VP Academic, Provost or VP Research
- One or Two (2) individuals drawn from CRKN's members institutions with the perspective of a researcher or faculty member
- One (1) Senior Communications Officer from a member institution with experience in developing campaigns

A staff member, at the discretion of the Executive Director, will provide support to the task group. At the discretion of the Executive Director, and in consultation with the Chair, other CRKN staff may be called upon to participate in meetings as resource personnel, as required.

The group may retain appropriate resource persons with a communications, lobbying or campaign background to support the work of the group, in accordance with Board-approved budget and procurement policies.

Appointment Process:

The members and Chair of the Institutional Mobilization Task Group are appointed by the Executive Committee and approved by the Board.

Meetings:

- Meetings may be held at any place as the Chair may determine
- Meetings may be held at any time provided written notice has been given to each committee member at least 7 days, exclusive of the day on which notice is given, before the meeting is to take place. Notice of meetings may be waived by unanimous written consent of task group members.
- 4-5 meetings are anticipated, with one in-person.
- Quorum for meetings is a majority of (non-staff) task group members

Lines of Accountability and Communication:

- The Group is accountable to the Board;
- The Chair of the Institutional Mobilization Task Group reports on its activities to the Board, and submits written recommendations as required for the Board of Directors' consideration;
- The Institutional Mobilization Task Group will take a consultative approach to its work, engaging members regularly and sharing progress reports via CRKN's typical communication channels (LIM, listservs, NewsBrief, etc.);

Financial and Administrative Policies:

- Service on the IMTG is non-remunerative;
- Travel and meeting expenses for task group members are reimbursed according to the policies and procedures of CRKN;
- Members of the working group will comply with Board-approved conflict of interest guidelines and procedures.

Timeframe:

It is expected that the Group will be formed in February 2015, and will have completed a sufficient enough portion of its work prior to the CRKN AGM in 2015 to be capable of delivering a substantial report to members at that event. Final recommendations will be delivered for Board review at the first Board meeting of 2016.

Appendix B: FAQ – Institutional Mobilization Task Group (IMTG)

Q: What is the issue?

Access to scholarly research is key to Canada's success in the global information economy, and the current (commercial) publishing model is placing that access at risk.

Q: What is the goal of the IMTG?

The goal of the IMTG is to encourage a united front within the academic community in order to facilitate a strong negotiating stance on the part of Canadian library consortia, to influence the publishing landscape and to create a more sustainable model of access to research content for Canadian researchers.

Over the past 15 years, the advent of digital publishing (and the so-called 'big deal') has democratized access to research content in Canada, to the benefit of the academic community. During that same time, publisher consolidation and competition has resulted in 5 commercial publishers controlling the majority of the research content published globally. These publishers are each able to reliably earn excessive profits by exclusively promoting and distributing the results of publically funded research, including the labour of faculty which serve as editors and peer reviewers.

Under this model, university libraries must pay ever increasing fees to access content to support their researchers, while researchers are often most incented to publish in and engage with the largest commercial publishers. The system reinforces the market power of the largest publishers, which use their oligopoly to continue to appropriate a larger and larger share of library budgets in Canada and internationally, to the exclusion of other content and other activities. This situation is not sustainable.

The goal of the Institutional Mobilization Task Group is to highlight the strides made in Canada to democratize access to research content in the face of evolving technological and industry pressures, to engage with the academic community (especially researchers and administrators) to promote informed choices which value and preserve the public investment in research, and ultimately, to make the academic publishing model more sustainable in Canada.

What lead to the formation of the IMTG?

The genesis of the IMTG came from a member resolution proposed at the 2014 Annual General Meeting in Calgary that called for a hard cap on negotiated price increases, explicitly directing CRKN to walk away from agreements with proposed increases higher than the cap. A friendly amendment was proposed to educate the broader member community first in order to garner full institutional support for such action. This led to the creation of the IMTG.

What would success look like for the IMTG?

As a first step, the IMTG aims to bring the issues and tensions between public good and private benefit in the academic publishing sphere to the attention of the Canadian university community.

The next step is to facilitate an understanding in researchers of the implications of their individual and collective choices with respect to volunteer time and effort in peer review and editorial activities, publishing and research choices, promotion & tenure decisions - on the larger academic enterprise. The aim of developing this understanding is to invite all members of the university to leverage its' collective power in influencing scholarly communications to create a more sustainable access to research content.

CRKN also hopes to raise the issue with aligned organizations in Canada and internationally.

It is hoped that the understanding and support of the Canadian university community, combined with aligned action in other jurisdictions, will ultimately empower organizations like CRKN and regional consortia in negotiations with publishers.

When will there be tools that can be shared with the community?

The group will present a toolkit of materials for use by members to facilitate conversations within their own institutions at the CRKN AGM on October 21st 2015. The toolkit will include materials such as an FAQ, an overview of the economic environment of Canadian University Libraries, a list of issues affecting Scholarly Communications, an infographic describing the complexity of the Open Access environment and other materials.

A final report of the group will be delivered in spring 2016.

Q: What is CRKN?

The Canadian Research Knowledge Network is a partnership of Canadian universities, dedicated to expanding digital content for the academic research enterprise in Canada. Through the coordinated leadership of librarians, researchers, and administrators, CRKN undertakes large-scale content acquisition and licensing initiatives, currently amounting to over \$100 million annually, in order to build knowledge infrastructure and teaching and research capacity in 75 of Canada's universities. CRKN was formed in 2004 to create a more formalized structure for the Canadian National Site Licensing Project (CNSLP), a project jointly funded by the Canadian Foundation for Innovation, provincial governments and individual universities.

Appendix C: Works Cited

CRKN, 2016. The Institutional Mobilization Toolkit available at <http://crkn.ca/imtq>.

Garfield, Eugene. 2006. "The History and Meaning of the Journal Impact Factor." *Journal of the American Medical Association* 295 (1): 90-93.
<http://garfield.library.upenn.edu/papers/jamajif2006.pdf>.

Snowdon, Ken. 2015. *Canada's Universities: Cost Pressures, Business Models and Financial Sustainability*. Ottawa: CAUBO.