

Newsletter prepared for the China Publishers Association Science & Technology Group members by STM

## Editorial

### To my valued colleagues in science publishing in China – Greetings.

When I visited China as Chairman of the International Association of Scientific, Technical and Medical publishers (STM), I was honoured by the reception given to me, and I was impressed by the skill and enthusiasm of Chinese science publishers.

Also in my role as Managing Director of IOP Publishing, I have the pleasant opportunity to collaborate with Chinese scientific organisations in the publication of several Chinese-based international journals. Here too I am aware of the strength of science publishing in China, and of course the impressive achievements of Chinese science which is rapidly becoming the world leader.

The speed of change in China means there is inevitably a need for me and the rest of the world to understand how China is developing its activities in publishing, and for us to share with China our experience in how science publishing has been conducted in our companies.

For those reasons, one of the initiatives I agreed with leaders of Chinese STM publishing was that the STM Association would produce an occasional Newsletter on publishing topics. The newsletter here is the first such production. The articles have been written by colleagues of mine in the STM community who are experts in their fields. The articles on Open Access, plagiarism, XML production, and electronic marketing describe our understanding of best practices and current thinking.

It is a pleasure for us to share our experience with our Chinese colleagues. I hope the newsletter will be useful and that it will be one more step in our increasingly close relationship.



Jerry Cowhig  
Former Chairman of STM  
[jerry.cowhig@iop.org](mailto:jerry.cowhig@iop.org)

## CrossCheck: Ensuring Quality Content Through Technology and Collaboration

by Kirsty Meddings, Product Manager, CrossRef

### CrossCheck: 通过科技与合作来保证内容的质量

对学术出版社而言，日渐重要的莫过于要出版高质量和原创的内容。尽管通过互联网获取并拷贝信息已经变得易如反掌，但是大部分对剽窃的审查仍然只是停留在编辑和审稿者的手动检查上。现在，CrossCheck已经利用科技的优势来帮助出版社一起合作来查证内容是否被出版过。参与的出版社允许CrossCheck为自己的出版物索引，并且由iThenticate文字比较系统来检测。手稿因此由CrossCheck的资料库审查，并与互联网上的相关存储网站，比如PubMed和arXiv.org进行比较，最后生成一个“原创度检测报告”。利用这一系统，中文论文同样能和其他中文出版物进行对比检测。

Publishers undertake a range of tasks as part of the editorial process to add value and authority to their publications by ensuring that material is both high quality and original. Plagiarism screening (checking for copied content) is one of these tasks, and with it comes a set of challenges that require a specialist approach

Plagiarism in academic publishing is not a new problem, but many would argue that in today's web-centric world it has become much easier to find and copy other researchers' writing or results. For scholarly publishers, plagiarism detection has traditionally had to rely on reviewers or editors recognising similarities with other papers, then embarking on the labour-intensive process of locating the original work in a different publication or archive and comparing the two. The repercussions of not detecting plagiarism until after publication can be costly not just financially, but in terms of reputation for both for the publisher and the authors involved.

However, advances in technology and the prevalence of online content – factors that may have inadvertently helped the plagiarist - are now coming to the assistance of those who wish to combat it. A combination of text

Continued on page 2

## CrossCheck: Ensuring Quality Content Through Technology and Collaboration Continued

matching software and publisher collaboration has created a unique new service to help publishers verify the originality of their content.

### *Automating the Screening Process*

Launched by CrossRef in June 2008, CrossCheck<sup>1</sup> provides publishers with the tools to detect instances of possible plagiarism in a more comprehensive, reliable and automated manner than has previously been possible. After a successful pilot project in late 2007 and early 2008, CrossRef has partnered with iParadigms<sup>1</sup>, the software company behind the widely used Turnitin text matching system. Turnitin and similar products have been common in schools and universities for some time, allowing teachers to check students' work for passages of content copied from other essays or from the Internet. These text-comparison systems use sophisticated algorithms to pick up not just verbatim copying but also slightly altered passages that share similarities with other documents.

Until now, these systems have been of limited use to scholarly publishers, as much of the content likely to be misappropriated in the research world isn't openly available on the internet and therefore can't be used for originality checking. This is where the collaborative advantage of CrossRef and its community of 2,600 member publishers really makes a difference.

At the heart of CrossCheck is a growing database of journal and book content from CrossRef publishers. When joining CrossCheck, publishers agree to allow their current and back file publications to be indexed and made available to other publishers for checking purposes. As it is added, the content is broken down and analysed for its "text fingerprint", then stored securely and unformatted in the CrossCheck database.

To screen manuscripts against this database, publishers use iParadigms<sup>2</sup> web-based iThenticate system. As documents are uploaded, iThenticate breaks them down and analyses them to compare the text with that in the CrossCheck database and millions of pages of relevant Internet content, including PubMed, arXiv.org and growing number of other repositories. The result is an "originality report" that highlights text in the uploaded document that exists elsewhere, and allows you to compare it side by side with the articles, chapters and web pages that match.

Of course the software is only making a mathematical calculation and displaying the results. It is at this stage in the process that a human being with domain expertise

needs to look at those results and make a judgment on whether genuine plagiarism has taken place. There are legitimate reasons why identical text might appear in two articles: bibliography sections for example will bring up matches with many other papers (and can if necessary be excluded from the screening process). Additionally, the software is not able to compare images or graphs, so a human has to interpret these. And while the iThenticate system can analyze non-English language text, including non-roman characters, it can only compare like with like, so Chinese language papers will only be screened against other content written in Chinese.

While CrossRef does not provide advice or guidelines on what to do when cases of plagiarism are identified, there are a number of industry organizations that do, including the Committee on Publication Ethics (COPE)<sup>3</sup> and the Council of Science Editors<sup>4</sup>.

### *The Deterrence Factor*

CrossCheck already has over forty participating publishers and seven million content items indexed for the database. Publishers who are not ready to start checking documents are encouraged to join and simply submit their content for indexing to ensure that other publishers do not mistakenly republish their works. CrossCheck members can use "CrossCheck Depositor" and "CrossCheck Deposited" logos on their websites and in their publications to make a visible statement of their commitment to plagiarism screening, and to act as a deterrent to those who might attempt to submit papers that are not their own work.

The success of the CrossCheck initiative is directly proportional to the number of publishers that participate. With continued growth and support from its membership, CrossRef will make effective plagiarism screening not just feasible, but a valuable part of the editorial workflow for academic publishers.

<sup>1</sup> <http://www.crossref.org/crosscheck.html>

<sup>2</sup> <http://www.iparadigms.com>

<sup>3</sup> <http://publicationethics.org/>

<sup>4</sup> <http://www.councilscienceeditors.org/>

**Visit the Events section of the STM Website for information on upcoming STM Seminars, Courses and Conferences: [www.stm-assoc.org](http://www.stm-assoc.org)**

**Comments from the '2<sup>nd</sup> Intensive Course in Journal Publishing – Asia' (March 2009)**

*'Well balanced...'*

*'It is successful...'*

*'Excellent and very current...'*

## OPEN ACCESS – update

by Robert Campbell (Senior Publisher) and Cliff Morgan (Vice President, Planning & Development), John Wiley & Sons

This update on Open Access first appeared in briefing notes distributed by Wiley-Blackwell to its clients in February 2009.

摘要：开放阅览 (Open Access)

Open Access — 更新

开放阅览 (简称OA)，是一种用户可以免费获取信息的出版方式。这一创新自2001年问世以来势头日益增长。近年来，OA的发展趋势已经迅速地从无偿开放到授权开放过渡有偿。其中的一个例子就是美国国家卫生研究院。OA有两种完全不同的模式：Gold Road (是指作者付款给出版社让自己的稿件内容可在网上开放给读者免费自取) 和Green Road (无需付费)——通常局限于作者的被接收格式以及在一段时间内开放。很多出版社采用Gold Road模式，甚至一些出版社将整个公司的经营模式都建立在Gold Road式开放阅览的基础上。现在越来越多人开始支持Green Road模式，这种模式对订阅量的影响究竟有多少还不得而知。应运而生的其他核心问题比如：Green Road模式对读者使用开放阅览的通道，作者的能见度，存储费用以及对欧洲科研生产力的影响等正是一个由欧盟资助并已经启动了的三年研究计划——PEER (出版以及欧洲的科研) 已经启动了的研究重点。

### Background

Open Access (OA) means that material is available for everyone to read, without having to pay subscription or “pay-to-view” fees. It has been advocated since about 2001, and has built up momentum since it is a seductive and populist notion that “information should be free”. In the UK, it became a matter of public policy when the Select Committee on Science and Technology of the UK House of Commons held an inquiry into scientific publications and published a report on their findings entitled ‘Scientific Publications: Free for All’ in July 2004. Even today, commentators still confuse the Committee’s recommendations with UK Government policy, which rejected them, saying that it did not think it should intervene to support one business model or another.

In the USA, the National Institutes of Health (NIH) introduced an initially voluntary policy of requesting researchers to deposit the post-peer-reviewed articles of research funded by the NIH to PubMed Central, but this was converted into a statutorily backed mandate when

author compliance was revealed to be very low (less than 5%). This took effect from April 2008.

A number of institutions (most famously Harvard) have also mandated that their researchers deposit articles into institutional repositories (IRs), with the policy sometimes preceding the existence of the repositories! Often, there is a lack of clarity regarding article versions, opt-out waivers, the position of co-authors in other institutions, and the rights that authors are ceding to their employer.

Even amongst IR protagonists, the picture is often painted of IRs being underpopulated, underfunded, and underutilised. (See for example Salo (2008).)

In the EU, Governments have shied away from imposing legal mandates for open access, although a number of funders have declared policies that vary from recommendations to mandates, and which may or may not be clear about article versions and acceptable embargo periods.

### The Two Roads to Open Access

As was established in the Select Committee’s report there are two distinctly different OA models, known by some as the ‘Gold Road’ (where the author pays for the published article to be made freely available) and the ‘Green Road’ (where OA is achieved by authors self-archiving their articles on Institutional and Subject Repositories for free access over the internet).

#### *Gold Road (also known as “author-pays”)*

Just about all major publishers have a Gold Road option, whereby authors may choose to pay the publisher to make their articles open access. (This is known as the “hybrid” option, where a publisher offers both an open access and a subscription business model.) Some publishers (such as Elsevier, Wiley-Blackwell, Taylor & Francis) limit this option to a subset of their journal portfolio (e.g. to biomedical journals, where there is more funding for researchers to use for this purpose); others (e.g. Springer) offer the option for all of the journals. A handful of publishers (the main ones being Public Library of Science (PLoS), BioMed Central, and Hindawi) have a “Gold Road only” business model. Some publishers (such as Oxford University Press) are experimenting with, say, one wholly-Gold Road journal, a number of hybrid journals, and a number of subscription-only journals. Prices vary, as do discount regimes (e.g. institutional membership schemes; discounts for authors from subscribing institutions; waivers for authors from the developing world; etc.). The wholly-Gold Road publishers have increased their article fees much more sharply than subscription or hybrid publishers, and PLoS is still heavily reliant on charitable support since its costs are significantly higher than its revenues.

Continued on page 4

**OPEN ACCESS – update****Continued**

Last autumn BioMed Central (BMC) was sold to Springer, which was taken by the pro-OA lobby to confirm that the Gold Road is now as economically sound as the established subscription-based model, although that seems to assume that every acquisition is a vindication of a business model.

Take-up of the hybrid option is reported as being very low (often of the order of just 1 or 2%, except in specialised areas (such as bioinformatics and computational biology), where the take-up can reach 20-30%). It will be interesting to see if these levels are maintained or increased, but we do not yet have sufficient longitudinal data.

One of the justifications for a research funder paying for the Gold Road is that it can achieve more citations. This assumption may not stand. Last July Davis *et al.* published the results of the first randomized trial of OA. They sampled articles due for publication in a group of physiology journals and randomly allocated them to either OA or subscription based publication. They found significantly higher online usage of OA articles but no significant difference in citation rates between the two groups in the first year of publication.

Another driver for the OA movement was that it would reduce costs; again an assumption now very much in doubt. The RIN (2008) study indicates that switching to e-only formats would make savings in the whole scholarly communication system but that a switch from subscription based publishing to the Gold Road would make no saving. Indeed it is possible that it would cost more as the authors did allow for some costs to the publishers in administering author-side payments but curiously did not include the administrative costs to authors, their institutions and funders.

And the big question remains unanswered. Will editorial standards drop if authors rather than readers pay? There are indications that they may. For example, Butler (2008) has suggested that a major Gold Road publisher, PLoS, can only stay afloat through 'bulk publishing'.

**Green Road (also known as "nobody pays")**

We are picking up some evidence that the growth in Gold Road articles is slowing, perhaps because authors no longer have the same motivation to take the Gold Road if OA can be achieved by the Green Road which costs them nothing and has been receiving more publicity. The Gold Road is simply an alternative business model; it is still based on a publisher receiving revenue for what it does, in contrast to the Green Road which makes no

contribution to publishing costs and indeed could undermine a system that is publishing around one and a half million readily accessible articles per annum to high standards.

Research funders implementing the unfunded mandate for self archiving argue that there is no evidence that articles posted on institutional and subject repositories undermine paid circulation especially if free access is delayed (the embargo period) and limited to the author's accepted version rather than the publisher's version.

We doubt that librarians are as foolish as funders assume. If content is widely available free of charge will they still buy it? A study published by the Publishing Research Consortium (Beckett and Inger, 2007) suggests that as more material is hosted on institutional and subject repositories, libraries will start to cancel subscriptions. Most of the librarians surveyed in this study felt that there is insufficient difference between the accepted and published versions to justify paying for access to the latter if availability of the accepted version is widespread. This was, however, a view from the librarians. A more recent survey carried out by the Bioscience Federation in the UK (2008) suggests that researchers are more sensitive to these differences and prefer to have access to the publisher's version.

We should learn more about this as a result of the PEER (Publishing and the Ecology of European Research) project which the EU has agreed to fund. The project will investigate the effects of large-scale, systematic depositing of authors' accepted (i.e. post-peer-reviewed) manuscripts on reader access, author visibility, repository costs, journal viability, and the productivity of European research. If successful this major project, which brings together publishers, libraries, repositories and funders, should help to determine the publishing policy of the EU, and indeed other funders of research. For example, if libraries are cancelling subscriptions to journals whose content can be accessed from repositories then publishers can rightly object to funders mandating researchers to archive for free access six or even twelve months after publication with many subjects where demand for articles remains high. It could also provide valuable insights into the effectiveness of the repository system versus what publishers now offer.

**Conclusion**

The Gold Road is an alternative business model, but there are questions over standards (it is certainly a barrier to authorship), whether it does actually drive up citations (since researchers who cite are already likely to have access to these articles via their institution's subscriptions), and whether it can introduce any savings in the overall scholarly communication system. The Green Road has been built on the false premise that

Continued on page 5

**OPEN ACCESS – update****Continued**

there is such a thing as a free lunch. We believe that a network of repositories which will be hugely expensive to create even without any contribution to publishing costs is unlikely to be as effective as the current system of journals. Funders should hold back on unfunded mandates to archive until the Green Road is better understood or the scholarly communication system could be seriously damaged. They should wait until they see the outcome of PEER and other similar studies. Policy should be evidence-based, not assertion-based.

**Authorship:** The views expressed here are those of the two authors and do not necessarily represent the policy of their company.

**Reading list:**

Beckett C and Inger S (2007) Self-archiving and journal subscriptions: co-existence or competition? *PRC Summary Papers 2*, Publishing Research Consortium.

Biosciences Federation (2008) *Learned Societies and Open Access: surveys of the financial contribution of bioscience societies to UK universities and of researchers' attitudes to Open Access and self-archiving*.

Butler D (2008) PLoS stays afloat with bulk publishing. *Nature*, **454** (3),11

Davis P M, Lewenstein B V, Simon D H, Booth J G and Connolly M J L (2008) Open Access publishing, article downloads and citations: randomised controlled trial. *BMJ*, **337**, a568

RIN (2008) *Activities, costs and funding flows in the scholarly communications system in the UK*. Research Information Network, London.

D. Salo (2008 but undated on the website) Innkeeper at the Roach Motel. Unpublished but available at <http://minds.wisconsin.edu/bitstream/handle/1793/22088/RoachMotel.pdf>.

For information on PEER visit: [www.peerproject.eu](http://www.peerproject.eu)

**STM would like to thank both the contributors of this issue and the newsletter editorial board members for their efforts in preparing this inaugural issue.**

**Particular thanks are extended to colleagues at World Scientific who have provided the Chinese abstract translations.**

The opinions expressed in articles are not necessarily those of the Editor or STM.

**XML : Publishing : : Water : Fish**

by Bill Kasdorf, Vice President, Apex Content Solutions, and General Editor, *The Columbia Guide to Digital Publishing*

摘要: XML

XML之于出版业; 水之于鱼

从总体而言, XML (可扩展标识语言)对当今的出版业十分重要。除了在出版过程中(比如评审, 排版以及行销)大展拳脚外, 它也被广泛应用到了出版物中, 包括印刷类(图书, 杂志), 在线资讯, 还有电子图书。XML不仅可以用于标识(标记一个文档的组成部分), 它还可以被用在元数据中(关于内容的信息)。它还有代码的作用, 比如 MathML, 就是一种应用在数学方面的XML编制。XML不仅在内容存储上发挥巨大作用, 它还能将内容转换为多种传送格式。过去, XML是在出版物印刷之后才被创建, 而现在, 它被广泛应用在出版的早期阶段, 这使出版社获益匪浅。

XML is becoming to publishing what water is to fish: ubiquitous but taken for granted. It's fundamental today to every kind of publishing—trade, educational, reference, STM. It's used in all aspects of the publishing process—peer review, editing, production, marketing, distribution. And it's used for all kinds of products, from print books and journals to online resources to e-books.

Even its full name—eXtensible Markup Language—is both limitless and limiting. XML is not a specific markup scheme or vocabulary, like HTML; instead, it is a language for defining markup schemes and vocabularies. It can be used to mark up everything from a simple business card to an astrophysics article. The former would have a vocabulary that would include elements like “name,” “title,” and “mobile number” and a syntax that would specify that “title” must follow “name”; the latter would have elements like “author,” “affiliation,” and “abstract.” These specific markup schemes are defined in DTDs—Document Type Definitions—or schemas.

When we think of markup, we usually think of this kind of “labeling” of the components of a document. But it's not limited to that. XML is used for metadata—information about the content—and even for what we might think of as “code.” For example, SVG, Scalable Vector Graphics, is an XML scheme for vector images; MathML is an XML scheme for mathematics. As for metadata, XML is used for bibliographic metadata (e.g., Dublin Core), marketing

Continued on page 6

## XML : Publishing : : Water : Fish Continued

and bookselling metadata (e.g., ONIX), semantic metadata (e.g., MeSH), and many others.

What this means is that publishers today need to contend with a myriad of different XML schemes used for different purposes. Gone are the days when a publisher could create, from the ground up, a single master XML DTD that could accommodate all their content and everything they might want to do with it.

Today, most publishers' XML is based on a standard model that has been modified for their specific purposes. A medical publisher would want XML conforming to the NLM DTDs that have become the de facto standard for biomedical content. A humanities publisher might want to use a DTD based on TEI, the Text Encoding Initiative. A publisher of technical documentation would want one based on DocBook. These are all rich, highly evolved, broadly adopted models.

What is most powerful about XML, though, is not just using it to *store* content. XML is a powerful tool for *transforming* content, adapting it for many environments, for many tools, for many products, for many purposes. In fact, two members of the XML family—XSLT and XQuery—are important tools for doing these transformations.

One XML model that is becoming very widely adopted is EPUB, the XML standard for e-books released in 2008 by the IDPF (International Digital Publishing Forum). EPUB, in turn, is based on two underlying XML vocabularies: XHTML and DTBook (the latter an international standard for accessibility). A publisher who may archive content in a more complex and robust model like NLM, TEI, or DocBook will very likely want to be able to generate XML for books in the EPUB format. EPUB is not an archival model, it's a delivery model. You need both.

In order to sell those books—in all their forms, print, online, or e-books—that same publisher will want to supply metadata to booksellers in ONIX XML. And those books become more “discoverable” on the Web when useful semantic tagging is added to them—whether with simple keywords or more formal taxonomies—again, with XML.

Where does this XML come from? In the past, it was mostly created after print publication—and often, today, it still is. But increasingly, publishers are realizing that it is best to implement XML upstream in the editorial and production process. Not only does that reduce the cost (when done properly), it also makes the XML available much earlier. The key is to optimize the XML for the

people, processes, and products at each stage of publication. When XML is used in production, it needs to be adapted to fit the capabilities of the staff and their tools; that XML can then be further enhanced and enriched to make it more powerful and more useful downstream. XML that is useful for marketing (particularly semantic information, what the content is “about”) is often best captured at the editorial stage, or even in the process of peer review.

Ultimately, having XML pays off in unanticipated ways. When an XML workflow is implemented thoroughly, it can result in great time and cost savings. Even more important are all the uses a publisher can then find for that content—not only by easily creating alternative versions of products (print, online, and e-books), but by creating new products from the same underlying content.

## E-marketing for STM Publishers

by Joe Lam, Managing Director (South East Asia) and Director of Marketing (Asia Pacific), Elsevier – Health Sciences Asia Pacific

2009 © Joe K.C. Lam. All rights reserved

### 摘要：网络行销

#### 网络行销对学术出版社的作用

尽管大部分的学术出版社（范围：科学，技术，医药）都有自己的网站，但其中许多公司没有获得他们所期待的财务或战略方面的回报。为了改进这种局面，出版社应当在网页中提供一些有趣且相关的信息来鼓励顾客重复浏览自己的网站。有一些软件工具可以用来查看自己的网站在众多同行中的表现；采用搜索引擎优化（SEO）能够让网站在搜索结果的面中排名上升，从而更容易被人点击，但需要仔细选择使用何种技术；逐渐增加与其他相关网站的链接必然会带来有效的结果，然而为这些链接付钱也会有相反的作用；电子邮件行销对和顾客之间搭建起长期的关系非常重要，不过要特别注意这种关系要建立在获得顾客许可的基础上。这些技术手法，配合有的放矢的信息内容都会有助出版社优化投资回报（ROI）。

Internet enables publishers to reach customers whenever and wherever they are ready to buy. However, the Internet has been a letdown for most companies. Certainly, the Website is at the top of STM publisher's priority list. Yet in any given year, only about half of the largest STM publisher websites attract more than 5 million<sup>1</sup> site visitors—and a similar percentage of sites generate no commercial

Continued on page 7

<sup>1</sup> SIMBA 2007 STM Publisher Activities report

## E-marketing for STM Publishers

### Continued

revenue at all.

If the economic return is minimal, the strategic payoff is even lower. Less than half of these websites capture any self-reported customer data. The few sites that manage to gather any information do a pretty poor job of it—we estimate that they compile meaningful profiles on less than 1% of their customers. And despite all assurances to the contrary, the Web is rarely a low-cost customer acquisition channel. There are, however, lots of free online marketing tools for STM publishers to market their products or websites.

### Destination Website

For a destination website to make economic sense, it must attract repeat visits from customers, with each visit adding ever greater increments of information to a customer's profile. For example, Amazon.com's business model is based on retaining each customer for a significant number of years—up to an astonishing 12 years by some analysts' forecasts. That is considered sufficient time to develop the deep, continuing relationships that will justify the company's heavy investment in its site. Such a model is well suited to STM publishers, whose dynamic, information-driven offerings generate repeat site visits that yield an increasingly detailed customer profile. In fact, it is not difficult and expensive to do it, Google offer a free web analytics tool (<http://www.google.com/analytics/>) to find out whether your site usage metrics under-perform or outperform those of your industry vertical. Opt-in benchmarking compares your key metrics against aggregate performance metrics while preserving the confidentiality of your data.

### E-mailing

E-mail marketing can often be suspected to be scams; hence, for any email marketing to be successful, it is important that we develop a trust relationship with our target audience. One of the best ways to achieve that is to build an opt-in email list and to maintain constant communication with readers on our products, services and achievements. It is hoped that by keeping them updated and establishing our branding in their mind share, good relationship will gradually be established.

Another benefit of having an opt-in list is that it allows us to focus on the right segments of our contacts database. People who have subscribed to your newsletters have indicated their interest in knowing the products and services you provide. Hence, being able to target at the right segments with relevant information not only increases the success rates of your marketing campaign,

but also convinces them that you are aware of their preferences and seek to provide them only information they will find useful and relevant. Such are the fundamental building blocks in establishing a trusting relationship.

How do we increase the numbers that opt-in to our newsletters? Building the mechanism to allow opt-in can be simple but it does not just stop there. To be effective in building up your email contacts, there are three key areas that you can work on to help you achieve that purpose:

- Knowing where and how to acquire the email addresses and opt-in
- Welcoming each new subscriber
- Managing the relationship after they have opted-in

Each area needs to be managed correctly in order to increase the subscriber's value to our business, our email marketing program and our perceived value to our subscribers. Building the opt-in list will take time and energy. However, this will be worth it because a robust, healthy and growing mailing list is the essential building block for an email-marketing program that delivers the ROI you need.

### Search Engine Optimization (SEO)

SEO is the process of increasing the amount of visitors to a website by ranking high in the search results of a search engine. The higher a website ranks in the results of a search, the greater the chance that that site will be visited by a user.

ABC of site optimization:

- 1) Page Ranks – take note of the Page Ranks of the site. Look for sites that have a ranking of five or more. Higher Page Ranking of the site will increase our chances of getting a higher spot on Search Engine Results Pages (SERPs).
- 2) Try not to pay for back-links. There are many sites out there that are trying to make money by charging you to have a link inserted. Google does monitor traffic coming from back-links and will penalize sites that purchase links.
- 3) Be sure to track where you are building these sites as directories do not like duplicate submissions. It takes time to get listed so you have to be patient. For natural search, it could take up to 2 to 4 weeks before you even see any result.
- 4) Do not create the links too quickly; do them gradually over time. Creating the links too quickly may be seen as spamming by the search engines.

“E-marketing” is not simply a tool for publishers to reach our customers, it will be an enabler to understand your customer. Profiling your databases will help to facilitate more targeted campaigns both for now and the future. Web 2.0 (e.g. Facebook or Blogs) is not something new, but it created a fundamental change of publishing industry. We are not far from Web 3.0, are you ready for the change?