BOOSTING OPEN ACCESS PUBLICATIONS WITH CONTENT MARKETING

Why content marketing matters to open access publications and publishers
Open access (OA) is meant to bring us closer to open science. So, what is hindering progress? The truth is, accessing the literature is only half of the story. The other half is the obstacle created by the use of specialised language in the scientific literature. An inability to understand the meaning of the research represents an even greater hindrance to open science and multidisciplinary collaboration than access to publications. The next step on the path to a more open science requires open access journals to make research articles accessible to a wider audience of specialists and non-specialists. Being open access is not enough. With thousands of open access publications available, a new approach to marketing and promotion is needed. This new approach centres on a transition from journal-led to author-led marketing and focuses on value-added content that is both engaging, understandable as well as scientifically accurate.

Whether they are open access or traditional, promoting articles through value-added content that lends itself to actions such as ‘sharing, explaining or enriching’ may increase article downloads by +23% (PLOS ONE). SciencePOD’s own estimate indicates that promoting an article through a plain language summary that is understandable to a non-specialist audience can increase downloads up to 35% (SciencePOD). Articles accompanied by video abstracts rank 33% higher than non-video articles in the same journal and 18% higher than papers published in all journals (Research Square). Moreover, articles with video abstracts are “accessed 80% more frequently than non-video articles” (Research Square). The use of infographics in marketing articles increases the rate of abstract views and influences Altmetric scores, suggesting that this form of value-added content also has a role to play in increasing awareness of published scientific research.
Brings attention to specific published research, journals and publications – in an increasingly competitive environment (millions of OA publications)

Can impact downloads, rankings, abstract views, Altmetrics and submission levels

Responds to demands of funding mandates for dissemination, transparency and accountability

Using quality value-added content such as digital stories and infographics to promote open access journals, articles and books yields the following benefits:

- Raises the profile of authors and their research – contributes to publishers’ author services and potentially facilitates collaboration among researchers
- Responds to demands of funding mandates for dissemination, transparency and accountability
- Brings attention to specific published research, journals and publications – in an increasingly competitive environment (millions of OA publications)

**BENEFITS OF VALUE-ADDED CONTENT**
HOW ACCESSIBLE STORIES CAN BREAK DOWN BARRIERS TO OPEN ACCESS AND OPEN SCIENCE

Open access (OA) is meant to bring us one step closer to open science. But the lack of widespread adoption of OA is often blamed for slowing down research progress. According to the European Commission, ‘open access to publications refers to the possibility to freely access research publications.’

The truth is, accessing the literature is only half of the story. The other half is the obstacle created by the use of specialised language in the literature. In other words, an inability to understand the meaning of the research represents an even greater hindrance to open science and multidisciplinary collaboration than access to publications. How can this be overcome? By developing value-added content specifically designed to make the original OA research accessible to a wider audience.
OPEN DOES NOT MEAN UNDERSTOOD

The next step on the path to a more open science requires OA journals to make research articles accessible (and understood) to a wider audience. Simply being open access is not enough. Publishers must change the way they market research articles. This means making the transition from ‘journal-led’ to ‘author-led’ marketing.

A transition to author-led marketing moves the spotlight from the journal to the researcher and the research itself. This involves creating content that focuses on the research – the ‘inspiring tales of life saving drugs, species on the brink of disaster, and the infinite wonders of the universe’ – and the researchers behind these stories, as described in a recent piece on building trust in science publishing.

The transition to author-led marketing and by extension, research or article-focused publicity, serves two key OA journal promotion strategies: author services and visibility.

Academics may be relatively new to the idea that marketing tools can be applied to their research. But if a research article is not marketed at all or it is not marketed correctly, then its reach is limited to a small circle of specialists (if even that), whether it is behind a paywall or freely available through OA. A 2019 study by Taylor & Francis concludes that although OA is popular among researchers, OA’s ‘full potential remains untapped’.

Effective engagement with a wider audience increases impact and opens up opportunities for networking and multidisciplinary collaboration. For that to happen, published research needs to be made visible and understood to scientists in other disciplines and beyond.

How can published research be made more visible and understood? Through digital stories. Author-led and research-led content marketing tools include plain language summaries, news stories, features, author interviews and profiles, infographics, videos, and podcasts. These types of value-added content work for both OA and traditional publications. The sample provided here is from Elsevier; it shows how a complex published research article is transformed into a visual story (an infographic) for a wide audience. This digital story can then be shared through the publishers’ and journals’ homepage and through social media campaigns. The infographic becomes a value-added asset for the publisher, the journal, the researchers and their institutions and the wider audience it reaches.

If a research article is not marketed at all or it is not marketed correctly, then its reach is limited to a small circle of specialists (if even that), whether it is behind a paywall or freely available through OA.
In-vitro and in-vivo measurement of the animal’s middle ear acoustical response by partially implantable fiber-optic sensing system

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ABSTRACT
The main obstacle in realization of a totally implantable hearing aid is a lack of reliable implantable microphone. In this paper we have described a potentially miniature fiber-optic vibrometer based on a modified Michelson interferometer, designed to serve as a middle ear microphone for totally implantable cochlear or middle ear hearing aids. A model of the sensing system was used for in-vitro and in-vivo investigation of acoustical response of sheep’s middle ear ossicles. Surgical and implantation procedure of introducing the sensing optical fiber into

COMPLEX SCIENTIFIC PUBLISHED RESEARCH TRANSFORMED INTO ACCESSIBLE, SHAREABLE INFOGRAPHIC

Hidden Hearing Aid
New implantable hearing aid with optical fibre microphone solves key problems

WHO estimates 360 million people worldwide have disabling hearing loss
32 million of these are children
Can lead to speech, educational and behavioural issues if not treated
Current hearing aids can cause infections, sound distortion, persistent ringing and other problems

Djinović, Z. et al., “In-vitro and in-vivo measurement of the animal’s middle ear acoustical response by partially implantable fiber-optic sensing system.” Biosensors and Bioelectronics (2018)
**USING DIGITAL STORIES TO GIVE OPEN ACCESS A BOOST**

We know from experience that transforming complex scientific papers into clear, concise and compelling digital stories can be challenging, but we also know that it helps increase visibility. Used as part of a publisher’s content marketing strategy, these accessible digital stories become value-added assets. They offer a unique value to the reader – an understanding of science – and to the author and publisher – greater research impact and reach.

Along with fellow scientists and students, funders, policymakers, journalists, investors and indeed the general public are also important audiences for a researcher. Research funding agencies and institutions increasingly require that research output is made public as a means of promoting transparency and accountability. Thus, the right content approach can help clarify the significance of research and help to persuade funding panels, inform policymakers or encourage industry collaboration. By indirectly attracting attention to the original research, content marketing activities also contribute to an increase in both paper downloads and submissions: two of the main challenges faced by library or national consortia and publishers.

Whether they are open access or traditional, promoting an article through actions such as ‘sharing, explaining or enriching’ may increase article downloads by +23% ([PLOS ONE](https://journals.plos.org/plosone)). SciencePOD’s own estimates indicates that promoting an article through a plain language summary that is understandable to a non-specialist audience can increase downloads up to 35%. Articles accompanied by video abstracts rank 33% higher than non-video articles in the same journal and 18% higher than papers published in all journals ([Research Square](https://www.researchsquare.com)). Promotion of articles through infographics appears to increase the rate of abstract views and influence [Altmetric scores](https://www.altmetric.com/), suggesting that this form of value-added content (infographics) also has a role to play in increasing awareness of published research.4

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**THE IMPACT OF VALUE-ADDED CONTENT**

**IMPACT OF PLAIN LANGUAGE SUMMARY**

- **+30%** increase in the number of downloads by sharing, explaining or enriching research papers, for example with plain language summaries.

**IMPACT OF VIDEO SUMMARY**

- **+80%** frequency of access.
- **+18%** higher ranking than articles without video.

**USING INFOGRAPHICS**

Increases rate of abstract views & influences Altmetric scores.
It makes sense to leave such value-added content to the professionals that do that best – science writers and other content creators.
Two non-OA examples from European Physics Journals (EPJ) illustrate how using value-added content could also be applied to OA journals. In both of these examples, content creators produced highlights based on research papers published in EPJ B and EPJ ST. It is important to note that the content creators involved in this project have dual expertise in physics and content creation. This allowed them to transform complex research material into accessible, easy-to-understand stories that appeal to a wide audience – without compromising scientific accuracy.

The highlights were published on EPJ’s website and distributed to the media. The bitcoin network highlight (example 2) was picked up by several writers and interested parties and amplified through various websites and channels, bringing further attention to the author, the research and the journal. The EPJ ST highlight (example 1) represents what might be considered an ‘ideal’ content marketing scenario. Here, value-added content, in the form of a highlight summarising research key findings in compelling and accessible language, garnered the attention of the New York Times.

CASE STUDY: TRANSFORMING COMPLEX PHYSICS RESEARCH INTO DIGITAL STORIES FOR EPJ

Champagne Owes Its Taste To The Finely Tuned Quality Of Its Bubbles

Based on this summary, this story was picked up by the New York Times as A Universe of Bubbles in Every Champagne Bottle.

What provides the wonderful aromas is a long neuro-physico-chemical process that results in bubbles fizzing at the surface of champagne. Ever wondered how the fins of champagne bubbles from their birth to their death with a pop enhances our perception of aroma? These concerns, which are relevant to champagne producers, are the focus of a special issue of EPJ Special Topics, due to be published in early 2016.

“I would like to thank you for the highlight on our paper about bitcoin network entitled, “Is the Bitcoin network an oligarchy?” It generated discussions in multiple websites in multiple countries.”

— Dima Shepelyansky, Paul Sabatier University, Toulouse, France
CASE STUDY: DIGITAL STORIES INCREASE REACH FOR ELSEVIER PUBLICATIONS

Articles published in Elsevier Material Science and Computer Science journals were promoted through 500-word ‘news story’ style content in language accessible to a wide audience. The news stories included new quotes from the research paper authors to enliven the content further. They were created by a team of content creators with subject matter expertise. The result was value-added content offering opportunity for multiple use: author services; content for journal homepage; content for a web landing page for a collection of journals; original material for successful social media campaigns.

CLEANING THE PIPES

News story for Elsevier Computer Science had a 15.51% CTR Rate and 75,106 link clicks in the first two weeks


A ROBOT THAT PAINTS

Generated more than 12,000 website visits from Twitter PPC campaign

BANKING ON MATCHING WITH MACHINE LEARNING

A CAR THAT PICTURES THE ROAD WITH A STEREO CAMERA

Generated more than 7,000 website visits from Twitter PPC campaign


Generated more than 13,000 website visits from Twitter PPC campaign

The OA science publishing landscape stretches beyond articles in scholarly journals. Books, monographs and book chapters are also part of the transition to open access. As with published articles, there is more demand for OA books and many research funders are mandating that books and book chapters are available in OA.5

The OA landscape and the broader changes in the publishing market demand new marketing methods: Simply putting an OA book on a platform and hoping people will find it is not a viable marketing strategy. OA content must be discoverable. Publishers must find ways to market OA books to broad communities of authors and readers.6 This means a greater emphasis on social media marketing as well as growing emphasis on digital stories that appeal to wider audiences yet maintain the accuracy of the scientific research that informs them.

Marketing efforts by publishers such as De Gruyter are transferrable and applicable to OA publications. De Gruyter publishes value-added content in the form of digital stories in web-based 'magazines' to promote the content of its publications – academic journal articles as well as books. These digital stories are aimed at a wide audience and are designed to increase visibility and discoverability of publications. Topics range from realistic robotic handshakes to the role of machine learning in illegal logging, monitoring biological sea contaminants and how digital media changes the way we talk.

CASE STUDY: MARKETING OA BOOKS AND CHAPTERS

HOW DIGITAL MEDIA IS CHANGING THE WAY WE TALK

Elisa Kellisen | 11.04.2018

A new linguistic study analyzes how technology transforms our communication. The current change is unique in its speed – and may have far-reaching cultural and educational consequences in the long run.
A transition to author-led marketing moves the spotlight from the journal to the researcher and the research itself. Digital stories, such as interviews and profiles, which focus on authors and their work present opportunities to engage authors and to reach wider audiences.

Is it worth it? Authors think so. The 2016 OAPEN-UK study found that authors place as much value on marketing and distribution services as they do on peer review coordination. Moreover, this type of value-added content (interviews) is particularly adaptable to different formats and distribution channels – text, audio and video – diversifying avenues for discoverability.

Making OA publications visible and discoverable through different value-added content formats:

**CASE STUDY: THE CASE FOR INTERVIEWS**

http://www.youris.com/environment/interviews/profile_stephen_stansfeld_has_been_studying_the_effect_of_noise_pollution_on_peoples_health_and_their_remedy.kl (Credit Innovation Seeds/Youris.com)

https://www.euroscientist.com/we-humans-fantastic-karaoke-singers/ (Credit EuroScientist)

https://blog.frontiersin.org/12/02/2016/scientist-at-red-sea-research-center-looks-at-the-role-of-bacteria-in3-d-coral-reefs-ecosystems/ (Credit Frontiers)
OA-STYLE FUNDING FOR CONTENT MARKETING

Marketing remains a vital stage in the publishing process, but it requires resources – time, capital and skill. There are many ways in which marketing value-added content can be funded. The most obvious source may be the marketing budgets of publishers or societies. But, the library and national consortia in charge of negotiating transformational deals with publishers should also be more proactive in including such services in the deal. They could allocate a fraction of the total OA deal budget to content marketing.

Publishers working with consortia have an interest in ensuring that scientists included in the deal actually use the APC provided as part of their deal. Typically, the APC is calculated based on previous publication levels. To ensure that publication volumes remain the same, publishers and research institutes must adopt effective content marketing approaches that support the uptake of pre-ordered APCs. Value-added content promoted through multiple channels, social media and email campaigns yields results.

For scientists whose papers are not included in consortia or publisher marketing efforts, we envision the possibility of authors themselves selecting which of their research papers merit being professionally turned into accessible digital stories – in the form of a proper plain language summary, a news-style article, an infographic, or a Q&A interview, for example. This approach requires OA publishers to include the option of adding a marketing fee to the APC. Ultimately, this does not fundamentally change the way resources are spent vis-a-vis publication, but rather represents a shift in who bears the costs of such marketing efforts.
ABOUT SCIENCEPOD

The first platform for science content marketing – clear, concise, compelling content.

SciencePOD stands for Science Prose On-Demand. We take complex ideas and turn them into effective and engaging digital stories for use in marketing, science communication and media. The SciencePOD platform is an innovative one-stop-solution for quality science content – giving you access to a global network of science and technology content creators and making it easy to order content through intuitive editorial and workflow tools.

Contact SciencePOD: editor@sciencepod.net.

For more information, visit the SciencePOD website: https://sciencepod.net

Register on the SciencePOD platform: https://app.sciencepod.net/register/client/
REFERENCES

1 Sections of this white paper are drawn from an article by Sabine Louët, SciencePOD founder and CEO, and are reproduced with kind permission from Research Information (published on 25 November 2019).


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6 Knowledge Exchange (October 2017).


8 Knowledge Exchange (October 2017).