

# SCIENCE IN THE NEWSROOM IN 2019

Keeping the facts straight

World Editors Forum Report

# Imprint

## SCIENCE IN THE NEWSROOM Keeping the facts straight

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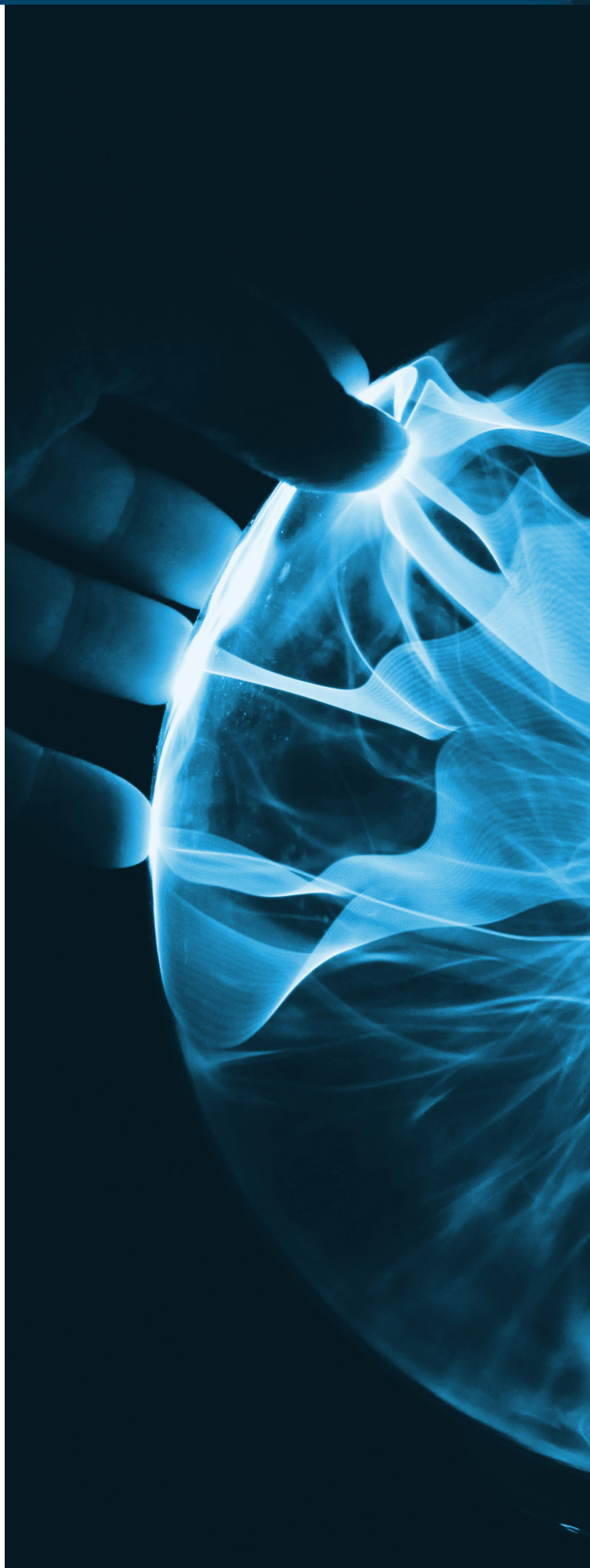
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## Foreword

The scale and depth of disinformation circulating in our societies is a deep concern, not just for the news industry, but for all those who believe that to function effectively, people need accurate, verified information.

Being able to trust news is critical.

That is why the World Editors Forum, the network for editors within the World Association of Newspapers and News Publishers (WAN-IFRA), is focused on addressing information disorder by strengthening professional journalism.

Our focus extends beyond political disinformation to the specialist subjects which impact the lives of those in our societies. It stretches to the type of information which informs how we choose to live our lives. In standard newsroom terms, this is what is reported around science, health and consumer affairs.

That is why we have initiated a Science in the Newsroom project to identify points of pain faced by newsrooms in covering these issues accurately, and to come up with solutions that will help strengthen the quality of reporting. An initial workshop has provided information for a multidimensional initiative to improve newsroom output. Our intention now is to deliver a programme that will have a meaningful result on newsrooms, and ultimately, the information we share. I trust you will support it.

Vincent Peyrègne,  
*Chief Executive Officer, WAN-IFRA*

### About the author – Fergus Bell, Founder, Dig Deeper Media

Fergus Bell, an experienced journalist and trainer, led a workshop, Science in the News, Keeping Facts Straight, in London in October 2019, which resulted in this report.

Fergus is a leading expert in digital newsgathering, verification, newsroom innovation and collaborative journalism projects. He is also a strong advocate for higher ethical standards in digital journalism. He is a former Associated Press International Social Media and UGC Editor and headed up newsroom partnerships and innovation for newsgathering start-up, SAM Desk. Fergus founded Dig Deeper Media in 2015 and advises broadcasters, publishers and start-ups on social and digital newsgathering, newsroom transformation and innovation.

He launched Pop-Up Newsroom, a framework for collaborative journalism projects that has already seen success in the US, UK, Sweden and won an Online Journalism Award in 2018 for 'Verificado' - an initiative to monitor misinformation during the Mexican elections. He is a Reynolds Journalism Institute Fellow.



## Introduction & Executive Summary

Emerging technologies, trust in the industry and bad actors spreading both mis and disinformation are challenges that all journalists will face in 2019. Specialist reporters in the fields of science and consumer affairs have to contend with the broad issues facing all of their peers, but also very specific off-shoots that impact directly on their ability to work to the highest of standards.

Niche reporters face an overwhelming volume of scientific data and papers but also unsubstantiated opinion and an ever-growing battalion of “influencers”.

In facing the same challenges as their peers, niche reporters have a lot that can be learned from both colleagues and the wider journalism community. These might be new storytelling techniques, new ways to visualise data or publishing methods that stop misinformation campaigns in their tracks. Journalists are used to developing sources, but niche reporters in the field of science and areas such as consumer affairs must develop trusting relationships with entire institutions or scientific communities – all within a sector that has a need to publicise its work but little knowledge of the process that must be carried out to do so.

## Co-design workshop

In order to address some of these challenges, WAN-IFRA developed a workshop focused on defining potential training opportunities for science journalists as well as practical tips and tools that can aid non-science journalists in this space or aid niche reporters on relevant projects.

By bringing journalists together with different experiences and using co-design methodology, we were able to fully map out existing processes in the reporting of science and consumer affairs stories. This then allowed us to identify both the challenges and opportunities for improvement in these fields.

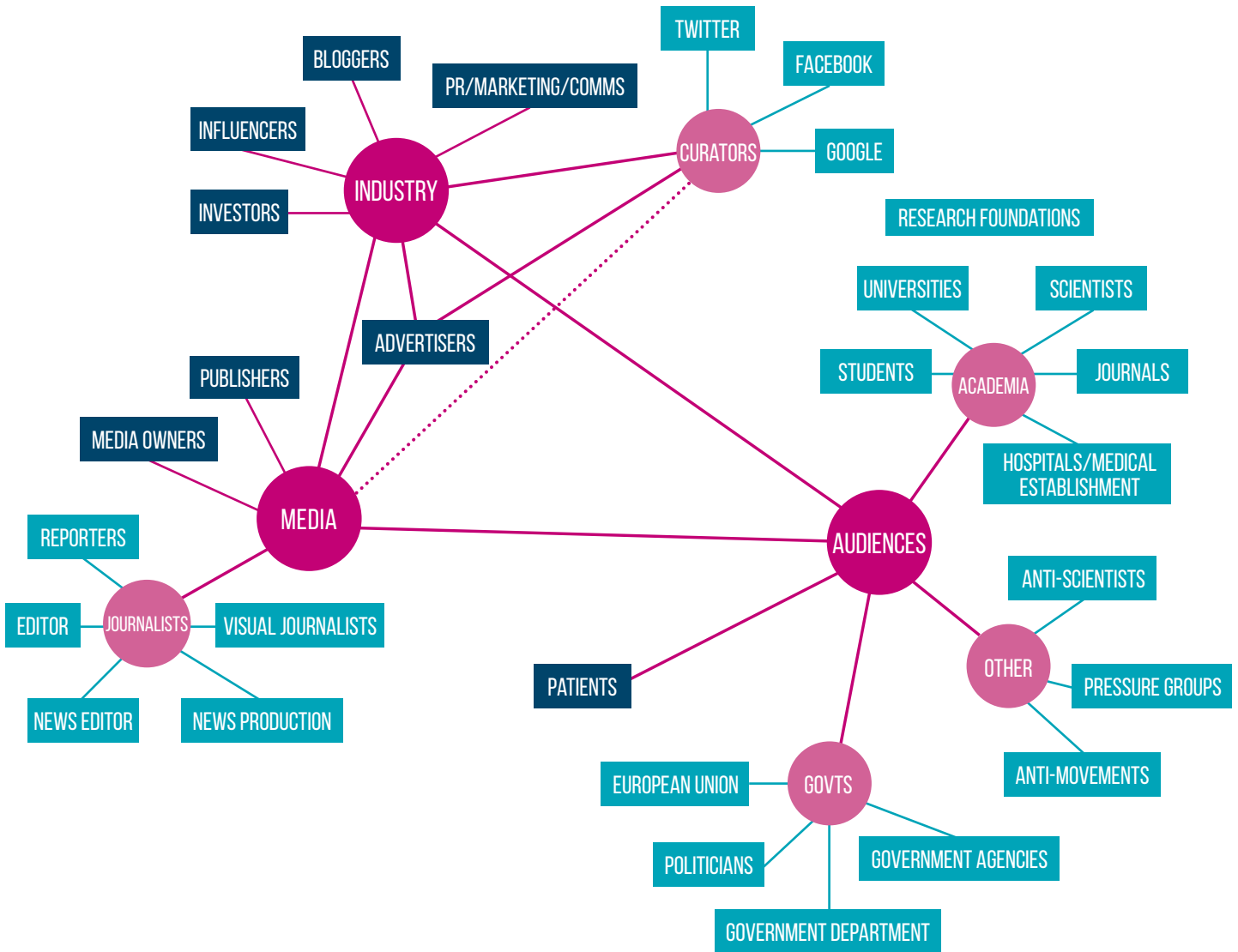
By publishing this design process, it is hoped that others might benefit from the expert discussions and perhaps build on their own initiatives to make significant developments, improvements and progress in this space.

The workshop – held in association with the UK Science Journalism Conference – was attended by a variety of journalists, including specialist science journalists working in a newsroom environment, science journalists working for specialist publications, journalists covering consumer affairs and general newsroom journalists who take on science/consumer stories.

The workshop was facilitated by Fergus Bell, a consultant for Dig Deeper Media.



# Mapping stakeholders



## Stakeholders in the accurate reporting of science stories

- Governments/government departments
- Journalists
- Scientists
- Universities – press officers etc
- NGOs/pressure groups
- Anti-scientists
- Other professions
- Regulatory professions
- PR, marketing, communications people
- Advertisers
- Research councils & regulatory authorities
- Investors – companies, private citizens & philanthropists
- Workshop organisers
- Research funders
- Audiences: readers, consumers
- Industry (pharmaceuticals to manufacturers)
- Suppliers (people that create products and supply them)
- Universities
- Institutions
- Politicians and political players
- Scientific journals
- International charities and NGOs
- Hospitals & medical establishments
- Students
- Patients & patient groups

The session led to a more nuanced list of stakeholders within the ‘media’ category.

The roles of media owners differ from journalists and news consumers by what they stand to benefit from accurate reporting. However, it is clear that impact through accurate reporting is an outcome desired by journalists and media owners.

In order to continue the granular mapping of processes and resources that would aid the creation of solutions, the group of experts also decided that journalists and journalism should be split into their component parts when talking about stakeholders.

The needs of a newsgathering journalist and a production journalist or visual journalist are all integral to the reporting process but have vastly different requirements when it comes to optimizing their processes for trust and accuracy.

Likewise, technology platforms cannot be put in the same category or even have a single type of stakeholder. Journalists use Facebook to both source and report on science and consumer affairs stories. Google makes money through advertising around content but also has devoted significant resources to creating products that help fact-checkers, and they show this content higher in their rankings.

Two major clusters were identified through this process: ‘Industry’ and ‘Reporters’ – with others grouped loosely together outside of these clusters. It was clear there were overlapping relationships and categories and that both sides may come at the same data, stories and information in very different ways.

“Impact through accurate reporting is an outcome desired by all”



# Statements as starting points

By analysing case studies covering different types of stories the group created statements based on common reporting challenges and blockages, which allowed for deeper thinking towards possible solutions.

## Q1: Our methods are outdated - how might we update our methods?

Turn the audiences from clients into partners

We need to find new business models for science journalism

Encouraging journalists to communicate more widely

Find different ways of telling stories

Nurturing journalist/science relationships to build trust - go beyond traditional ways of publishing science stories

Go around PR/comms to direct access to scientists

Find different ways of finding stories

Have scientists understand the reporting process

Diverse pool of sources

## Q2: How might we adapt our reporting on research-heavy stories for a fast-paced news environment?

Create bite-sized storytelling/instalments

More internal collaboration - e.g. work with investigative team

Work with investigative reporting teams



### Q3: Audiences don't trust reporting - how might we improve trust?

Show that we are editorially independent

Combating fake news on social media as it spreads

Find methods to report on falsehoods/perform fact checking

Evergreen explainers on what makes a journal/source material trustworthy

Demonstrate that reporting is factual and free of political bias

Find ways to stay impartial and demonstrate it

Transparency of the process used by journalists to trust sources

Understanding the psychology of trust

Demonstrate context

Illustrate the use of a multi-source process

### Q4: Readers don't understand science and consumer affairs reporting - in what ways can we help them understand?

Use more evergreen explainers that we can link to

Use colour - longer features and reads that explain context/show

Have more prominent context in stories

Use social media to write quirky posts to engage users in interesting ways

Use different formats to tell the stories to vary the way people can take it in

Make experts & expertise more accessible

Fun and informative visuals

Make the presentation friendly and relevant

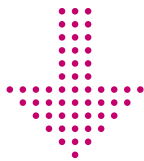
Understand and engage audience

Linking to background info/explain certain jargon

“ How might we improve audience trust and how can journalists find sources they can trust? ”

“ Audiences don't trust reporting ”

“ Journalists need to combat fake news on social media as it spreads ”

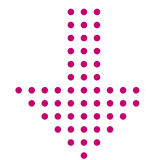


### Suggested routes to solutions:

- ✓ Find methods to report on falsehoods without giving them undue 'oxygen'.
- ✓ News organisations and journalists must find ways to show that they are editorially independent, finding ways to both stay impartial and to demonstrate impartiality - including by proving that reporting is free of political bias.
- ✓ A bank of evergreen explainers on what makes a journal/source material trustworthy would be a useful asset to both reporters and audiences.
- ✓ Identify resources and processes of engagement that empower audiences to decide what they can trust for themselves.
- ✓ Identify ways in which the process used by journalists to trust sources can be more transparent and to explain how multi-source processes work.
- ✓ Identify ways that journalists can demonstrate clear context for research and developments that they are reporting.

“ The methodology of science reporting is outdated ”

“ How might we find new models for science journalism? ”

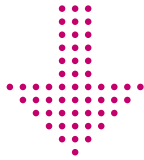


### Suggested routes to solutions:

- ✓ Nurture journalist/scientist relationships to build trust that goes beyond the traditional publishing of science stories.
- ✓ Encourage journalists to communicate more widely within their own community and identify different methodologies through industry knowledge-sharing or better relationships with peers in different countries or niches.
- ✓ Identify ways to reach scientists directly in order to avoid misinterpretation of research by press and PR officers.
- ✓ Identify ways in which scientists can be empowered to understand the reporting processes, requirements, challenges and time constraints reporters face in covering their research and papers.
- ✓ Find different ways of telling stories to reach new audiences (e.g create bite-sized storytelling instalments).
- ✓ Work with investigative reporting teams to break different types of science and consumer affairs news.
- ✓ Identify different ways of finding stories beyond the well-established methods of papers being released.

“ Science reporting is not optimised for a breaking news culture ”

“ How might we adapt our reporting on research-heavy stories for a fast-paced news environment? ”



### Suggested routes to solutions:

- ✓ Use more evergreen explainers – with links.
- ✓ Long reads showing emotions and human interest.
- ✓ Have more prominent context in stories.
- ✓ Use social media to write quirky posts to engage users in interesting ways.
- ✓ Make experts and expertise more accessible.
- ✓ Using fun and informative visuals.
- ✓ Link to background information to explain jargon.
- ✓ Make presentation friendly and relevant.
- ✓ Use different formats to tell stories.



### Insight

Audiences of all kinds – even around niche or specialist subjects – receive and digest information in different ways. For this reason, it is essential to bring diversity to the formats and techniques used for storytelling. The idea is to broaden and vary formats rather than simplifying reporting for all.



# Analysing the challenges in science, consumer affairs and niche subject reporting

There are challenges that are unique to being a reporter of niche topics. Through roundtable discussions the workshop attempted to highlight the challenges that this type of reporter faces, especially when it comes to covering stories or concepts that require long-term coverage with clear peaks and troughs in interest.

## The challenges

The workshop focused on trusted expertise as a starting point for the process of mapping out workflows for iteration.

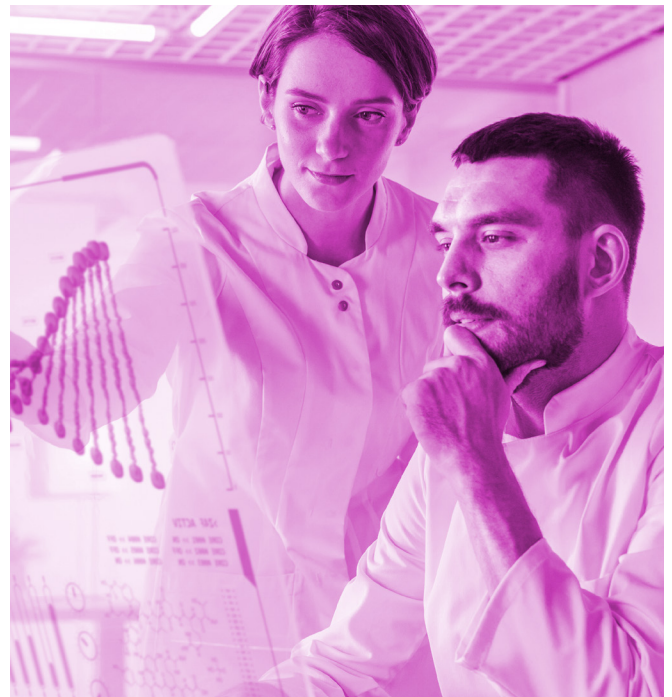
Expert sources that were identified:

University press offices	Reviews
Science Media Centre	Independent scientists
Quangos	Learned societies
Book authors	Trade bodies
Consumers/case studies	Regulators
Scientific journals	Trusted surveys

Despite the trust earned by the above groups there was still a conclusion that access to a willing and diverse pool with speed, efficiency and accuracy was very important.

Some core elements related to improving access to research and connected individuals:

- More open access research – journal subscriptions, etc.
- Having knowledge of exactly what is available online
- Access to original source data
- Direct access to scientists



## Insight

The issue of press offices was divisive with accounts of both positive and negative experiences in equal measure. Ultimately it was agreed that involving press offices and officers should be part of the solution.

Press offices are the bridge between journalists, scientists and research and meaningful engagement with them is essential.

Running similar facilitated workshops featuring representatives of the different sides of the process (journalists and science PR) would be valuable in order to identify and resolve sticking points, many of which appear to be unintentional.



## Mapping science reporting workflows

The process of mapping out the workflow of science reporting served a number of purposes. It identified blockages and pitfalls that can be tackled and avoided as well as used as springboards for creating task lists in the training process of non-specialist reporters or new journalists.

The group was asked to look at sources, decision points, processes and outputs. They were also asked to consider the following questions:

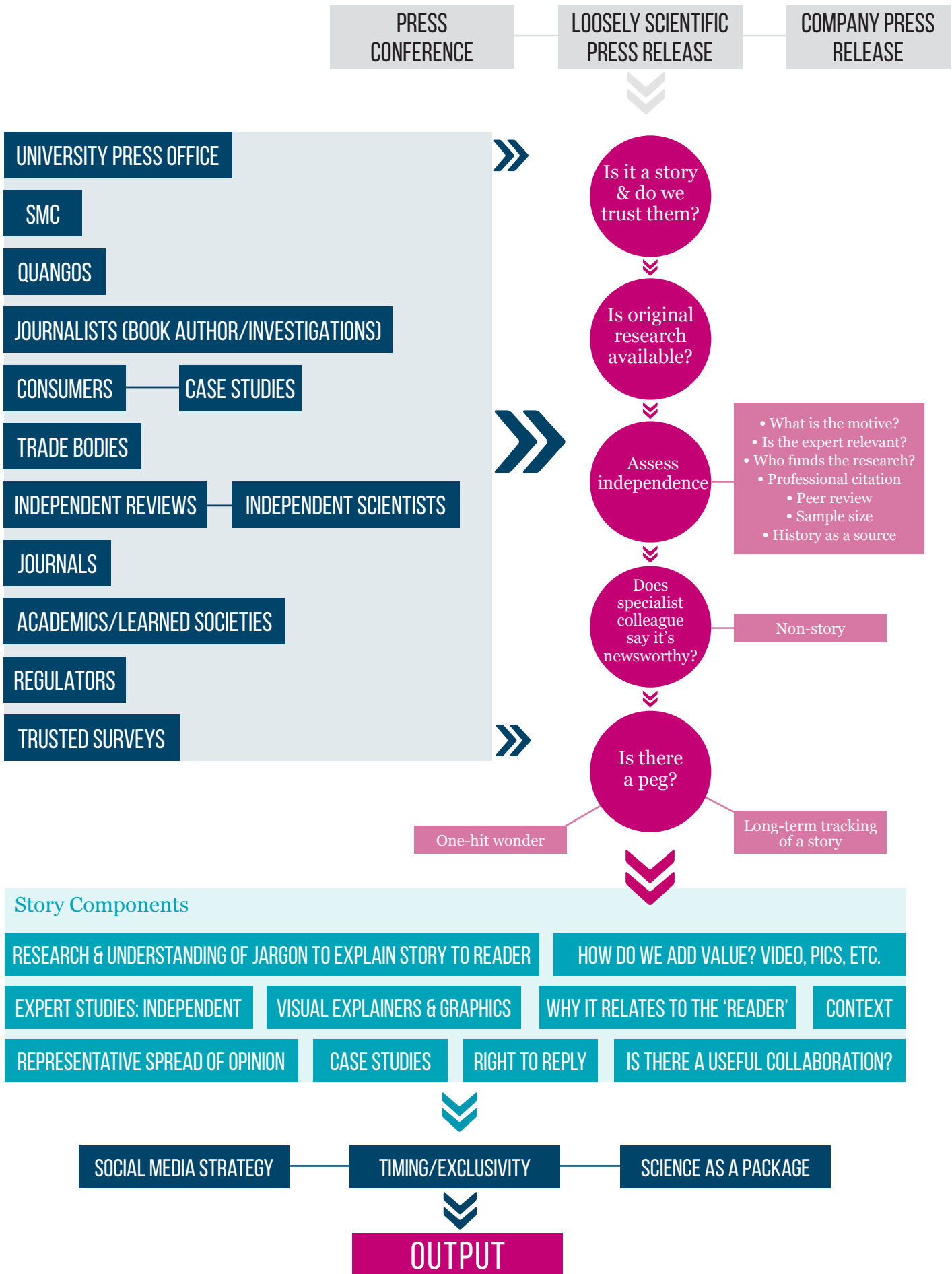
How do we set up newsrooms to get support from general reporting colleagues?

What workflows do we need to implement fast, accurate and engaging reporting?

How can we create a more frictionless reporting process?

The workflow below sets out in detail how the flow of information should pass through a newsroom in a way that is optimised for trust, speed and accuracy.

It represents a significant amount of input from the workshop group and should be considered during any implementation of training or best practices moving forwards.





# Preliminary recommendations

## Junk News and Fake Stories

Combating fake stories on social media as they spread is an obvious issue for the science reporting community to address. However, this specific action is not just restricted to science and consumer affairs reporters and much industry attention and resources are going towards potential solutions to this problem.

For the science, consumer affairs and niche subject reporters, a useful contribution to that ongoing work would be to provide a highly specific list of recommendations pertinent to improvements in the space that they consume:

- A set of guides covering the latest theory on junk news and misinformation would be a worthwhile project. Rather than a printed document - which will become quickly outdated - some kind of updatable portal would be best. This might also help facilitate peer-to-peer knowledge exchanges (see below).
- In terms of audience understanding, a set of evergreen explainers would be a useful addition to a science journalism toolkit. They would have to be adaptable to the style and tone of the specific organisation using them and they would have to be useable across formats. Science journalists should also be kept abreast of highly specific issues facing the subjects and industries that they report on. This might require the commissioning of detailed research to help identify issues that may be overlooked by those addressing the subject broadly across the news industry.
- A visual journalism workshop or section within a hard-copy toolkit on the issue of science reporting would be very useful.
- Once guides, evergreen audience explainers and research on misinformation in relation to science reporting have been completed a next step would be the training of journalists in all of the elements within this growing toolkit.
- More generally, ongoing debates over misinformation and “fake news” should take account of the detrimental impact of junk science reporting.

## Journalists vs. Influencers

This was a recurring theme throughout the workshop. It is clear that online influencers exert significant...influence. However, while they occupy the same space as journalists and their methods are arguably effective it is not necessarily something that journalists should replicate. So, how do reporters on niche subjects compete in the same place as influencers?

- Getting stories outside of people’s filter bubbles is very important and will help the long-term struggle against confirmation bias. One particularly valuable workshop contribution: ‘Trust doesn’t always indicate truth’<sup>1</sup>.
- The science reporting community could be encouraged to become a part of organisations such as The Trust Project as a way for audiences to be empowered to trust reporting expertise and expert sources<sup>2</sup>.
- There is also potential to create a new set of standards in the field of science and consumer affairs reporting.



1: Useful Research: ‘Who shared it?’: How Americans decide what news to trust on social media - [www.americanpressinstitute.org/publications/reports/survey-research/trust-social-media](http://www.americanpressinstitute.org/publications/reports/survey-research/trust-social-media)

2: <https://thetrustproject.org>

## Developing expertise

Journalists covering niche subjects or broad subjects with very specific areas that require detailed knowledge need opportunities to develop their expertise:

- News organisations could develop opportunities for personal development and learning for those journalists required to cover large, ongoing stories that require deeper expertise. Much like Google gives its staff 20% of the week to explore new things, a similar model could be used to help niche subject journalists better expand their knowledge in certain areas.
- Partnerships between news organisations and universities in order for journalists to access courses and programmes where they can expand their knowledge.
- The creation of a database of expertise for easy access to commenters and resources on niche subjects would be highly desirable. The database should have a strong offering of diversity – sourcing women scientists to talk to the media was a problem identified by all workshop participants.

When developing expertise, it is important to consider how to create a lasting impact in this field. It would be advisable for training efforts to be aimed at news organisations with a mind to improving best practice across the board, rather than solely empowering a set of current journalists.

With newsroom turnover becoming an increasing problem it is even more important that knowledge can be retained, and new processes are built into newsroom workflows. This could be implemented through a train-the-trainer programme, high level news leadership seminars or individual consulting with newsrooms to aid change management.



## Making the niche general

Reporting on stories like climate change where a lot of focus has been on effects, but little on causes and solutions, shows that more actionable stories are needed in order to engage people and allow them to understand developments over extended periods of time.

- There need to be opportunities to integrate niche reporting methods into general stories. In the case of climate change it doesn't always require a specific science story, instead news organisations could integrate science reporting into a tourism or weather story.
- This is one area where specific training for general reporters would be very valuable as a way of making these subjects (e.g. climate change, the danger of plastics, e-cigarettes, fracking, electric cars) more accessible and capitalising on general reporting engagement strategies.

# Toolkits: Resources for new journalists and non-niche colleagues

Training individual journalists could be one approach to getting more general reporters into niche reporting, however updatable resources for newsrooms could be more scalable.

## A number of toolkits should be created for:

- New journalists entering newsrooms but who are required to cover specialist subjects
- General reporters and editors who could give valuable help in identifying newsworthy stories or screening for junk
- Digital storytelling in science or data heavy subjects – applying different reporting techniques to break down complex issues
- Scientists and their press officers, who might benefit from understanding what would be useful when engaging journalists on stories
- All journalists to understand how to read scientific research correctly, a skill which science journalists said is often overlooked and requires help to develop

## Science as ‘packaged journalism’

It is apparent that specialist reporters often miss out when training opportunities in new storytelling techniques are offered within news organisations.

However, an understanding of the latest storytelling techniques might allow science journalists to frame their stories in a more compelling and ‘packaged’ way. This could include a greater emphasis on the impact of graphic elements: video, audio, photos, immersive experiences, etc.

## Forums for peer exchange and collaboration

A forum for peer exchange where journalists can learn from other journalists about how they ‘did it’ would be valuable for niche subject reporters.

- These reporters rarely get access to journalism conferences and have a bigger need for a deeper dive than what a conference panel could offer. This would be an opportunity to share skills and build a knowledge sharing community. Workshops, design events or round-tables could be organised with the specific aim of peer to peer knowledge exchange.
- Cross-border collaborations on major stories was a widely popular concept within the workshop with many benefits made clear.

## Conclusion

This report is based on a workshop which threw up a large amount of issues and a variety of creative solutions.

It is clear that there is huge opportunity for WAN-IFRA, the publishing industry and newsroom leaders to boost the quality and impact of science journalism by providing working journalists – and their organisations – with tools and training that will allow them to do their job better.





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