

Investigative Journalism on Oil, Gas and Mining: Has Donor-Driven Use of Digital Technology Made a Difference?

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Abstract: Journalists around the world now use big data and data visualization to report and write powerful stories about the effects of resource extraction. They use mobile and social media platforms to disseminate their work. Much of this coverage was driven by foundations and Google who believed in data journalism and funded training and tools to promote it. It's not clear, however, whether the journalism has an impact and if it can develop an enthusiastic audience and help generate revenue for the outlets that report and publish data-driven journalism.

Keywords: African media, global muckraking journalism, investigative journalism, extractives, data journalism, sustainability, donors, foundations

Journalists all over the world are taking risks to expose corruption and wrongdoing by powerful companies and governments who were thought to be untouchable. Thanks in part to social media, big data and an array of online tools, investigative reporting on oil, mining and tax avoidance is thriving.

Over the years we have examined coverage of the extractive sector in order to see whether our initial optimistic forecasts about the powerful

Citation: Schiffrin, A., & Powell, R. (2019). Investigative Journalism on Oil, Gas and Mining: Has Donor-Driven Use of Digital Technology Made a Difference?. In R. Krøvel & M. Thowsen (Eds.), *Making Transparency Possible. An Interdisciplinary Dialogue* (pp. 137–158). Oslo: Cappelen Damm Akademisk. <https://doi.org/10.23865/noasp.64.ch12>
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role of digital technology had come true. We hoped that the internet would help solve the problem of power and information asymmetries inherent in extractive sector reporting, and help level the playing field between journalists and powerful companies and governments.

We predicted that digital technology would foster cross-border collaboration and give isolated journalists in under-resourced newsrooms a way to find new sources and new data, and disseminate their work. We hoped that once and for all, journalists and non-governmental organizations (NGOs) would be able to collaborate and make information more transparent, expose the misdoings of oil and mining companies, and help keep governments accountable.

This chapter has given us a chance to survey the field and assess whether our original forecasts were too optimistic. The use of digital tools and data-driven reporting has helped journalists do a better job of holding governments and corporations to account. Of course, not all that we had hoped for has happened, but around the world we have seen more in-depth reporting and powerful investigative journalism on the extractives. Journalists are using big data and data visualization to report and write powerful stories, and then use mobile and social media platforms to disseminate their work. Such examples can now be found in Africa, Latin America and Asia, as well as in the traditional strongholds of the US and Europe. This reporting does not necessarily have an impact – and it certainly does not address the perennial problem of financial sustainability – but it is there and the quality is better than ever. For this chapter we interviewed many of the funders and people who taught journalists how to use data and digital technology in their reporting. We also include case studies from around the world in order to provide a taste of what is being done.

People who teach data reporting believe in it and say there is no turning back. “Everyone knows that using data is how you get a real story that cuts through the crap. It’s a battle you don’t have to fight anymore. It doesn’t mean the story is always useful and that we’ve won the battle of moving away from anecdotal and societal investigation. It’s always tempting to go for the low hanging fruit of going to a community and interviewing five people, but it’s understood that data is an important mindset to have as well,” said Will Fitzgibbon, a reporter with the International Consortium

of Investigative Journalists who has worked with teams of journalists to produce the Panama Papers, Paradise Papers and Fatal Extraction series.

Digital tools help data gathering, presentation and dissemination

When we refer to digital we mean the use of online tools and platforms that help journalists gather information, present it and disseminate it. Online tools allow journalists to work collaboratively across newsrooms or borders to produce series like Fatal Extraction, the Panama Papers and the West Africa Leaks.

Tools are often case specific and range from communication methods and visualization to easy document analysis and data liberation. For example, the Panama Papers leak developed Global I-Hub, a communications platform derived from the open-source software Oxwall, that enables communication and file sharing with two-step authentication. For cross-border projects documents must be readable and so journalists use tools like Tabula,¹ which allow users to copy and paste data out of PDFs into Excel. Further, tools like Tableau Public and Flourish Studio enable journalists to make attractive and compelling videos and maps, as well as charts, from complicated data in order to tell public interest stories. Other visualization software helpful for collaborative investigative journalism projects include Linkurious² and Piktochart.

Journalists also take advantage of journalism-specific online networks and open forums. In 2018 the collaborative digital platform Hostwriter, an online network of hosts and tools for professional advice for freelance journalists engaging in cross-border reporting, was injected with EUR 500,000 from a Google Impact Challenge Award³.

After the work is done, social platforms help journalists and citizen journalists spread their work quickly around the world. Bloggers and

1 Tabula, <https://tabula.technology/>.

2 Linkurious, <https://linkurio.us/>.

3 Smolentceva, Natalia (2018). For journalists interested in cross-border collaborations, Hostwriter offers opportunities and resources. *International Center for Journalists*. <https://ijnet.org/en/blog/journalists-interested-cross-border-collaborations-hostwriter-offers-opportunities-and>.

journalists in many countries, including Ghana, Kenya and Tanzania, depend on social media to disseminate their work. Especially in Africa, news and comments are growing amongst the internet-connected, through blog conversations and SMSs that reflect, and reflect upon, mainstream news (Paterson, 2013). These forms of digital engagement help audiences express themselves and circulate public opinion (Moyo, 2009).

“Social media demonstrate an unprecedented ability for the politically engaged both to bypass and influence traditional information flows, but social media use faces unique challenges throughout much of Africa, due to underdeveloped telecommunications infrastructure, limited (though rapidly increasing) extra-urban mobile access, and bandwidth limitations in many areas” (Paterson, 2013).

Trends in digital news consumption vary within regions. “Tanzanians are increasingly becoming voracious social media consumers. With nearly half a million monthly users on Instagram and 10 million users on WhatsApp, the audience is moving online. To put that in perspective ... Tanzanian YouTube viewers often outnumbered Nigerians, despite the latter being a larger population with – on the whole – better internet access,”⁴ writer Mwegelo Kpinga said in a 2017 *Medium* post.

Incorporating data into journalism products has also been transformed by the digital era. As Alexander Howard, of the Tow Center for Digital Journalism says, “Data journalism is telling stories with numbers, or finding stories in them. It’s treating data as a source to complement human witnesses, officials, and experts. Data journalism combines: (1) the treatment of data as a source to be gathered and validated; (2) the application of statistics to interrogate it; and (3) visualizations to present it, as in a comparison of batting averages or prices” (Howard, 2014). For example, statistics can be portrayed more clearly through visualizations such as mapping tools. In some cases, journalists also benefit from access to information and easy-to-use data analysis tools online.

4 Mwegelo Kapinga, “How journalists can use social media to build an audience”. *Medium*, August 17, 2017. Accessed: <https://medium.com/hacks-hackers-africa/how-journalists-can-use-social-media-to-build-an-audience-69bcc4f3ff80>.

Foundation funding spreads digital tools and data journalism

The spread of digital tools and data journalism among journalists covering extractives and/or doing investigative journalism during the last ten years is a case study of donor-driven innovation. Foundations like the Gates Foundation and the Omidyar Network deliberately decided to develop and spread these tools, and worked with the World Bank, which was pushing data transparency as a solution in developing countries. They funded fellowships and training around the world. In Africa alone, training in data reporting has been supported by Code for Africa, Oxfam, the Natural Resource Governance Institute, the West African Media Initiative, and the Thomson Reuters Institute. Internews was also heavily involved. As the foundations and media development organizations pushed data journalism and digital tools they became more invested by doing so.

Funding was given by the Bill & Melinda Gates Foundation, the Omidyar Network and the World Bank to the International Center for Journalists for its Knight Fellowships Program and to Code for Africa, led by South African data journalist Justin Arenstein. They organized capacity building, mentorships and conferences. “[W]e employ a variety of measures to help journalists, media managers, entrepreneurs and executives embrace new forms of reporting and storytelling, audience engagement and business development. This includes building new teams at news organizations, introducing new models of collaboration that improved workflows across newsrooms, launching contests to fund experiments, developing digital tools designed around the needs of local newsrooms, helping newsroom leaders identify new hires and roles that would make their editorial teams more innovative and working with them to find new ways to generate revenue to support quality journalism,” said Ben Colmery director of the ICFJ’s Knight Fellowships Program.

Knight and Code for Africa also funded product development and trained journalists in the use of a range of tools including Document Cloud (Knight Foundation), WaziMap in South Africa (Code for South Africa now known as OpenUp), and OpenAfrica (Code for Africa).

For Colmery who, as director of the ICFJ’s Knight Fellowships Program, made a huge effort to promote digital tools in Latin American newsrooms, the purpose of the program was not just to change the newsrooms where they worked but to spread innovation regionally.

“What we want is to instill a culture of innovation in the newsroom and break down barriers so people can try new things in new ways and overcome cultures of bureaucracy, stagnation, lack of training and lack of internal resources. We try to make a dent in how journalism is done in a country or a region and change the landscape. The best way to do that is to work with a few newsrooms and make a change there, and then you see it cropping up in other newsrooms,” Colmery said.

According to an analysis of the Knight News Challenge, successful projects imbued modes of participation and distributed knowledge on such phenomena as crowdsourcing, alongside innovative features not typically practiced by journalists, such as engineering and software development (Lewis, 2011).

It’s not clear how much funding has been used on developing digital tools for journalists and promoting innovations (including data journalism), but we estimate it is approximately twenty million dollars over the past 10 years. For instance, Code for Africa⁵, via the International Center for Journalists (ICFJ), received a donation⁶ of \$4.7 million from the Bill & Melinda Gates Foundation in 2015, and in 2017 the Omidyar Network and Open Society Foundation provided⁷ \$4 million to the South Africa Media Innovation Program. The website of the Omidyar Network claims it has committed \$220 million over the last ten years on a “Governance & Citizen Engagement initiative to drive accountability and transparency of government”, but did not provide data for Africa or for data journalism. Ory Okolloh did confirm in an email that the Network supports Code for Africa, Publish

5 Code for Africa, a civic technology and data journalism initiative that develops dozens of digital media tools (including openAFRICA), <https://codeforafrica.org/>.

6 Arenstein, Justin (2015). \$4.7 million data journalism initiative launched in Africa, *Medium*. <https://medium.com/code-for-africa/4-7-million-data-journalism-initiative-launched-in-africa-189856fa68d4>.

7 Omidyar Network (2017). South Africa Media Innovation Program (SAMIP) launched by Open Society Foundation of South Africa (OSF-SA), Omidyar Network and Media Development Investment Fund. <https://www.omidyar.com/news/south-africa-media-innovation-program-samip-launched-open-society-foundation-south-africa-osf>.

What You Pay and the Natural Resource Governance Institute, as well as “funding for innovation/experimentation – Code for Africa, SAMIP”.

This donor-driven intervention had a huge effect. It spread ideas around the conference circuit, and Knight Fellows embedded in newsrooms provided follow-up. In the process there was plenty of good publicity for Google, which helped fund many of the efforts and sent emissaries to journalism conferences all over the world. Some started to feel that data journalism was the way of the future and that the possibilities were limitless.

“In the last five-ten years there has been a buzz around data journalism. Any journalist who has gone to an international conference or had a training or is connected to an international Fellow knows about it now,” said Will Fitzgibbon, a reporter with the International Center for Investigative Journalism, who has worked with many journalists on how to use tech, “There is always that moment at a training session when the jaws in the room drop as journalists see what is possible with documents they have at their disposal but hadn’t known how to use.”

No evidence that tech helps newsrooms generate revenues

However despite all the funding and the buzz it is not clear that using digital tools to gather and disseminate information will address what has always been the major problem of journalists in Africa and other low-income countries: lack of revenue and the difficulties in becoming financially self-sustainable. Nor is it clear that funding multiple startups will help the media ecosystem as a whole become financially self-sustainable. In fact, the different outlets may start to compete for audiences and advertising revenue in places where these are limited.

Prue Clarke has been working with *New Narratives* in Liberia for the past ten years, helping media houses and reporters there break news and win awards. She thinks donors should focus their support, in each market, on one or a few outlets that have shown themselves to be free of political interests and serious about developing an independent business model. By helping it become a standard setter for the whole media ecosystem, they show what is possible, attract readers, advertisers and the best journalists,

and raise the bar for everyone in an ethical direction. “Training individual journalists is just creating a stepping stone for a brain drain directly to a job in government or the World Bank or the aid world.”

The best pedagogical practices, knowing which individuals to target for training, capacity building and education continue to be unresolved questions. The standard problems of development are also present in media development. It may be a misallocation of scarce resources to do massive training in advanced digital tools. However, until many people have been exposed, it is not clear who will embrace and use the new technology.

“Success often hinges on one really talented person who loves data, gets data and stays up till 2 am and makes a genius discovery. It’s less clear to me that newsroom-wide investment in basic data training where you encourage everyone to learn pivot tables, for example, helps produce strong investigations – at least in the short term. Data journalism is a lot about ‘use it or lose it.’ And I’ve seen lots of training events where it is quickly evident that few reporters will have the opportunity to use skills they have just spent hours or even days learning,” says Will Fitzgibbon.

Critics of the donor push for data journalism argue that it in fact has not really spread organically or been embedded in newsrooms. While the training is fun and interesting, reporters go back to the newsroom and are unable to continue the work on their own.

Indeed, newsroom training is usually a push effort. Editors identify the skill gaps in a particular team, an outside trainer prescribes a curriculum, and human resources makes it mandatory to attend. The structure is very much like a class, with a few exercises and maybe even a graded test at the end.

Embedding innovation in larger media houses may be more effective than training at conferences with many journalists, as large media houses can use their money and clout to take risks and pursue stories and agendas that small, budget-conscious media outlets are unable to do (Schiffrin et al., 2015, p. 20). For example, Eyewitness News in South Africa says it was the first media house in the country to use WhatsApp to communicate with its audience (ibid., p. 21). The *Star* in Kenya is another example of a large outlet where management and editors sought to mainstream data-driven reporting.

NGOs provide non-financial support to journalists too

Apart from funding, there are other ways that NGOs support transparency and public interest journalism. Believing that accountability and investigative journalism are public goods, many NGOs try to provide information and how-to guides to journalists that they cannot get on their own. NGOs can also support data availability. They use their expertise to prepare and present data in ways that are easy for time-strapped journalists to plug into their own reporting. Indeed, given that many journalists lack the skills to handle complex data-sets, it is a time-honored tradition for NGOs to do some of the research for them.

Some NGOs also have journalism-specific initiatives to promote investigations, and assist reporters by developing data portals or dashboards to provide easily accessible information. Open contracting and open government campaigns have unearthed a host of data and document resources for journalists to triangulate their stories, while drone technology has enabled new visuals and access to new angles and resources. However, tools (data dashboards and web applications) do not solve the problem of cultivating good quality data journalism alone. Training also needs to reflect the country's reality. Observed good media development practice means working with newsrooms as a whole for extended periods of time – up to two years – to develop data journalism and technical skills. This has the added value of being sustainable, in cases where newsroom cultures adapt to these new practices. Such media development initiatives are often unconnected to initiatives that build tools and make data usable/available.

Below, we present and analyze some examples of data and digital tech initiatives as examples of innovative journalism projects in the extractive sector.

Broken links, data dumps, out-of-date information

There are now a number of topic-specific repositories, databases, annotated document archives and toolkits that can help journalists investigate good governance concerns pertaining to extractive industries, such as

illicit finance and tax avoidance. One problem is that many do not provide much data and the data becomes obsolete very quickly. A cursory search online finds a number of sites that, in principle, sound useful but in fact are full of broken links and out-of-date information.

Another revenue management problem that could be helped by having good data and an informed citizenry, is that caused by countries with large resource projects that take resource-backed loans without a guarantee of realizing these projects. Economists Jim Cust and David Mihalyi identified this trend in their research on the “Presource Curse”. “The oil discovery and the financial windfall it promised appeared to usher in an era of economic imprudence: heavy borrowing, profligate spending, and exposure of the economy to the oil price crash of 2014” (Cust & Mihalyi, 2017). In the case of Ghana, this led to borrowing over \$4.5 billion in international markets (ibid.).

Data initiatives are one way to provide tools to oversight actors like journalists, and to set standards for open data. “Resource Projects” was created in 2017 by the Natural Resource Governance Institute (NRGI) (disclosure: with which the authors are affiliated). This project provides easily visualized and exported financial figures divulged from stock exchanges in Canada and the EU to the public around the world. To help societies discuss the cost and benefits of oil, gas and mining projects, this web application uses data released as a result of “disclosures mandated by recent regulations to provide data on project and government entity level payments. This data is intended to allow governments, citizens and civil society actors to better model resource revenues and forecast budgets.”⁸ Journalists can use data from the portal to corroborate other sources in their stories. For example, if portions of contract information are unavailable through traditional disclosures such as the relevant ministries in each country, this data set provides granular data points for journalists to then be able to flesh out how much money is paid by extractive sector companies to different government entities around the world. The extent to which this has been or will be used by journalists is unclear.

Some data initiatives are region-specific. SourceAFRICA uses the technology developed by DocumentCloud to provide annotations and easy

8 Resource Projects, Natural Resource Governance Institute, <https://resourceprojects.org/about>.

access to different documents relevant to investigations on the continent. SourceAFRICA is a service provided by the African Network of Centers for Investigative Reporting with funding from Code for Africa. The platform is Africa's largest repository of leaked/investigative documents⁹. The platform leverages different online tools to collate and annotate documents for journalists to access and add sources of information to their stories. OpenAFRICA is the companion open data portal currently used by 48 organizations like Quartz¹⁰ for building charts, GotToVote!¹¹ to help citizens register to vote, government agencies such as the Department of Justice and Constitutional Development¹² in South Africa, and the fact-checking initiative PesaCheck in East Africa.¹³

Tools and data are not everything. We do not yet have information on how these projects have affected journalism. Supporting media innovations in response to the demands of local audiences and newsrooms seems the most effective method. Making data available may complement these processes. Still, there are challenges to traditional media development practices in newsrooms. NGOs must carefully consider the role of journalism in target countries (Do they function as a public service watchdog?), and be aware that technical training in data-use may seem irrelevant and intimidating for a media house to commit to¹⁴.

Using innovation to cover the extractives sector

Below are some examples of noteworthy coverage of the extractive sector. Some involved innovative data collection, storytelling and dissemination and/or found new ways to bring different groups of reporters together. Others benefited from diverse forms of mentorship and journalist capacity-building

9 SourceAFRICA, <https://sourceafrica.net/>.

10 Quartz Atlas for Africa, <https://blog.qz.com/tagged/atlas-for-africa>.

11 GotToVote!, <https://gottovote.cc/>.

12 Department of Justice and Constitutional Development, Republic of South Africa, <http://www.justice.gov.za/master/trust.html>.

13 PesaCheck, <https://pesacheck.org/>.

14 Constantaras, Eva (2016). OpenGov voices: Why data journalism tries, and fails, to go global, *Sunlight Foundation*. <https://sunlightfoundation.com/2016/02/10/opengov-voices-why-data-journalism-tries-and-fails-to-go-global/>.

which helped expand the network of reporters. They used diverse revenue streams and audience outreach strategies including regional competitions, exhibitions and events, direct philanthropy and aid, and tried to bridge traditional and experimental forms of storytelling to target relevant audiences.

1. *#minealert – helping trackmining licenses in Southern Africa*

One initiative highlighting extractive sector abuses is Oxpeckers' #minealert mine-tracking mobile website and app. Oxpeckers¹⁵ is a South Africa-based small investigative media outlet that covers environmental issues, especially developments in the extractive sector, with data mapping tools. Oxpeckers was begun through the African News Innovation Challenge (ANIC) and later received support from Code for Africa, and is able to innovate quickly because of its modest size (ibid., p. 99).

Oxpeckers established #minealert, a tool for tracking and sharing mining applications and licensing processes. This shows how niche models like Oxpeckers leverage big headings for diverse products. #minealert supported investigations into the social, economic and climactic legacy of coal mining in South Africa using long-term data investigation¹⁶, the environmental costs of phosphate mining¹⁷, and balanced appraisals of ongoing mining prospecting¹⁸.

2. *The Gecko Project – an NGO uses multimedia to expose the dark side of palm oil in Indonesia*

“Indonesia for Sale” is a series of three gorgeously produced multimedia reports unearthing corruption and environmental devastation in Indonesia's palm oil industry. The package was reported and published by the Gecko Project, an investigative reporting site founded in 2017 by

15 Oxpeckers, <https://oxpeckers.org/>.

16 Olalde, Mark (2017). Coal mines leave a legacy of ruin, *Oxpeckers*, <https://oxpeckers.org/2017/04/coal-mines-legacy/>.

17 Olalde, Mark (2016). Seabed prospecting undermines blue economy, *Oxpeckers*, <https://oxpeckers.org/2016/11/3345/>.

18 Thomas, Julia (2018). Is Mabola open for mining? *Oxpeckers*, <https://oxpeckers.org/2018/05/is-mabola-open-for-mining/>.

U.K.-based environmental NGO Earthsight and based in London. The series was produced and published in collaboration with the environmental news website Mongabay. The Gecko Project was the brainchild of journalist Tom Johnson, who had previously worked for the Environmental Investigation Agency in London. Johnson wanted to bring together advocacy, investigative journalism and multimedia into one big package of reporting, in the hope that investigative journalism and high-quality multimedia would make a difference.

“Digital has been vital in our ability to get the outputs in front of an Indonesian audience. Facebook penetration is high, and Indonesians are really engaged on Facebook. Using targeted promotions, we’ve been able to drill stories right back into the districts that are the subject of the stories. These are remote places that barely have any form of reporting on the issues that are affecting them deeply, and why. A second aspect relates to our reporting methods. We relied extensively on Facebook to track down individuals, to make connections between them and sometimes to contact them. We’ve also used LinkedIn to expose companies that are using their employees as proxies, to disguise their ownership of their subsidiaries – what are effectively shadow companies. That said, once we’ve made such connections, it’s back to gumshoe reporting. The internet has allowed us to find out things we simply couldn’t without it, but it only takes us so far, and then it’s back to knocking on doors,” said Johnson.

The lengthy series tells it all: sordid land-grabs, a web of corruption that spread from powerful local families to the political elites of Jakarta and abroad, shell companies and environmental destruction. The written text alone is more than 40,000 words – including explainers and analysis – and is accompanied by powerful images and videos. Dozens of people were interviewed for the project including fixers, middlemen, environmental activists, villagers who were affected, politicians, corporate lawyers and employees of plantation firms.

“I was inspired by the AP series on fishing and the emergence of single issue campaigning journalism organizations like the Marshall project and dedicated investigative outlets like ProPublica, which married together a lot of the things I wanted to do. I thought about what

would be the stories I would want to read,” Johnson said about the project, which began early in 2017 and involved two full-time reporters as well as freelancers and freelance filmmakers and photographers.

Launched in October 2017, the project has led to a growing recognition of the role of multinational and Indonesian plantation firms in undermining Indonesia’s democracy. The Corruption Eradication Commission, Indonesia’s anti-graft agency, has used the findings to inform its work, their investigators and senior officers have said. In total the project cost about \$150,000 to do, and was funded by the Waterloo Foundation and a major US foundation that asked to remain anonymous for fear of antagonizing the Indonesian government.

The reports have been published on the California environmental-based news site Mongabay as well as its sister site in Indonesia and distributed on social media platforms. They have also been co-published with *Tempo*, Indonesia’s leading investigative magazine, and syndicated by numerous other sites and blogs under a Creative Commons license. Low-tech means were used too: photocopies were made and distributed by motorbike messengers on the island of Sulawesi. An estimated 500,000 people have seen the stories on Mongabay and the Gecko Project sites, Johnson said, and 10% have finished reading them. The completion percentage is higher in Indonesia where the story resonates locally. The final investigation in the series was published as the cover-story in *Tempo* magazine in November 2018, reaching more than one million readers.

“It’s probably too long but to tell the story properly, it needed to be that long. It really tells the story of modern Indonesia from autocracy to democracy,” Johnson said, adding that the videos on Facebook have attracted close to one million views, boosted engagement and sent people to read the reporting. “We’re confident that the stories will have an impact, and this is only the start of the project,” said Johnson. “We’re at the start of exploring a very rich and deep vein of corruption, and the further we go the greater the chances there will be some form of meaningful response – from government, enforcement agencies, or galvanising civil society to address the specifics of the problem in a more effective way.”

3. *#WestAfricaLeaks – coordinated reporting on corruption in West Africa*

#WestAfricaLeaks (published in May 2018) was the first time journalists across West Africa collaborated on a series of incisive investigative journalism unearthing corruption. Supported by Cenozo and ICIJ, #WestAfricaLeaks coordinated 13 journalists from 11 West African countries to use the data and resources available from bigger leaks for targeted reporting in West Africa.

The initiative responded to the dearth of investigations in the region inspired by cross-border investigations like the Panama Papers and Paradise Papers. “#WestAfricaLeaks was meant to be explosive. Panama Papers didn’t go viral in Africa. \$700 million was retrieved in the United States and Europe, and a Pakistani politician will go to jail for ten years, but nothing happened in African countries,” according to participating journalist Emmanuel Dogbevi from Ghana.

Dogbevi’s piece unveiled violations of the Vienna Convention by the then Ambassador of Ghana to the United States. The ambassador held a 3.5 percent stake in an offshore oil block in Ghana and sold his stake while in office, without declaring his political affiliation, making \$350 million on the sale.

An Al Jazeera documentary raised the important question of how much impact the investigative journalism series achieved. “One of the group of journalists’ greatest challenges was getting their readers, their governments, and in some cases even the media outlets they work for, to care ... What set #WestAfricaLeaks apart is the media landscape. The conditions in which journalists work.”¹⁹

4. *Chai Khana – cross-border reporting in the South Caucasus*

“ChaiKhanaiswhatyoureadafterthenews:adocumentarythatyousitand watch,thatdivesintothecharacters.ChaiKhanashadowsadifferentcross-border topic every two months” in the South Caucasus. “It focuses on underrepresented individuals. Most people are publishing news

19 <https://www.aljazeera.com/programmes/listeningpost/2018/07/making-breaking-west-africa-leaks-180707085021334.html>.

and analysis, but we want to highlight these issues through character-driven stories,” according to founder Caroline Sutcliffe.

The outlet is funded by the British Embassy’s Conflict Stability and Security Fund. In a region that is traditionally conflict-ridden and with a young culture for investigative journalism, the outlet surmounts challenges by developing the reporting community through capacity building and mentorship, and emphasizing locally-rooted stories. They have around 200 freelancers across the region often reporting stories they pitch individually, said Sutcliffe.

The outlet’s audience is diverse, reaching rural, affected communities as well as individuals throughout the region. To reach their target audiences, Chai Khana experiments with different forms of storytelling. “80 percent of our audience is between 18 and 35 years old,” said Sutcliffe. These storytelling forms include an emphasis on visuals in the form of animations and documentaries, with current experiments employing drones and virtual reality. To engage rural audiences, they publish and advertise content via Facebook. To engage different audiences and build the site’s reputation, they employ unique outreach strategies. These includes community engagement activities in the form of exhibitions, and film screenings specific to their published content.

In its first year, Chai Khana published investigations on environmental degradation and pollution caused by copper mining in Armenia. A recent cross-border multimedia piece, “Shared Waters”, covers the effects of overusing and contaminating the Kura River that passes through Turkey, Georgia, Azerbaijan, Armenia and Iran through personal narratives and visuals, thus illuminating a shared regional resource in an area prone to cross-border conflict.

5. *100Reporters – seasoned reporters train journalists on extractive sector investigations*

Impact through hard-hitting investigations by local reporters is priority number one for 100Reporters. This non-profit news outfit and set of mentors seeks to promote transparency and good governance through investigative journalism. 100Reporters publishes stories on its outlet

and in cooperation with the likes of *Salon* and *Foreign Affairs*. The journalists they support target the deleterious sides of opaque industries, like corruption and attributed deaths in mining sites, with freshness and precision.

“Journalists are getting training, but where do they publish and who’s working to bridge this gap? We bring guidance into the system to get reporters on the ground to better understand and identify reporting partners.” According to its executive editor and co-founder Diana Schemo, 100Reporters “works with reporters on the ground, to then help them fill in the outlines of the story”.

They deliberately avoid large training environments, preferring to build teams and support them by running through drafts, discussing digital and physical security, and where to look for documents.

Journalists they work with have uncovered a host of hard-hitting extractive sector stories. Recently in Cameroon, “a two-year investigation by 100Reporters has found that the project, though managed by President Biya, has failed to pay royalties, training fees and taxes to the Cameroonian treasury, even as it made payments to investors totaling millions of dollars.”²⁰ In 2016, 100Reporters published a story by Estacio Valoi in Mozambique investigating the mislabeling of blood diamonds by officials in charge of verification.²¹

Is there any impact? Does tech and data reporting help financial sustainability?

The replication of innovations is a sign of success for donor-funded projects in the media (Robinson et al., 2015, p. 14), but it is not clear whether any of the innovations discussed in this chapter help solve the main

20 Locka, Christian (2018). Cameroon: Gas project brings royalties for shareholders, but few benefits for locals or national coffers, *100Reporters* (February). Accessed: <https://100r.org/2018/02/cursed/>.

21 Valoi, Estacio (2016). The blood rubies of Montepuez: Troubling pattern of violence and death for responsibly sourced gems, *100Reporters* (May). Accessed: <https://100r.org/2016/05/the-blood-rubies-of-montepuez/>.

problem journalism faces globally: lack of funding. Nor is it clear what sort of impact the stories have had.

Even the funders of data journalism admit that measuring impact is hard. Tracking the effects of capacity-building is hard. It can also be difficult to follow the reporting of the journalists who have had the training, since many of them do not write much afterwards, or their work is not available online, while others leave the profession. Once investigative articles are published it is difficult to know whether it is exposure journalism or other factors that lead to changes in government policies or corporate behavior. For example, if street protests follow media coverage of a corruption scandal in Nigeria, it is difficult to know what exactly caused the protests.

“It’s very hard to demonstrate attribution or even articulate how journalism’s contribution to change has happened,” says Miguel Castro from the Gates Foundation. “In a complex ecosystem like African media for example, we can’t tell beyond the anecdotal what was the result of the work of Code for Africa and other partners of the challenge funds created over the last few years, or Omidyar’s and others’ work. But definitely there has been a significant contribution to growth in newsroom understanding of digital and data storytelling.”

Proponents of data journalism and innovation argue that the resulting reporting will attract audiences, boost engagement and help media outlets carve out a niche for themselves, as well as help raise the outlets’ profile in a crowded media market. They also argue that journalists need to develop an entrepreneurial spirit, and that embracing innovation can help.

Indeed the Media Development Investment Fund, which has spent years trying to nurture new business models for media outlets around the world, provides “funding for new approaches such as app-based news providers or mobile-targeted content, regional expansion efforts for companies with a proven business model, as well as traditional distribution mechanisms in markets where they are still relevant.”

Innovation diffusion may also occur through a large media house that is able to support and incubate new ideas. Or it can occur through entrepreneurs who decide to try something new (Robinson et al., 2015, p. 169).

Others, such as *Animal Politico* in Mexico, focus strictly on web content and audience outreach through social media. This model allows *Animal Politico* both to engage with digitally-based and young audiences, and to avoid a dependence on government advertising²².

Supporters say tech training helps develop local entrepreneurs

Craig Hammer, who is secretary of the World Bank's Development Data Council and leads the World Bank's Global Media Development program, noted that capacity building and the development of new skills has helped local journalists get extra work as data editors and graphic designers, and so it has supported local entrepreneurship. Or as he put it, "As robust data analysis in news media becomes ever more mainstream across regions, so, too, are new models for organizing the work of data journalism taking root, including a growing subcontracting, or entrepreneurship, approach. Data journalism training is helping to contribute to the growing pool of technical professionals who may avail themselves of associated new opportunities."

Data may contribute to how media outlets distinguish themselves and thus help their position in the media market. However, a direct relationship between profitability and the use of technology and data reporting is hard to pinpoint.

Hammer points to an uptick in public consumption of data-driven news content in Kenya, which is a result of capacity-building support in the country by a few key organizations. One example is Internews' support for *The Nation Newsplex*²³, the public interest data team of the *Daily Nation*, which disseminates data-driven analyses both through the *Daily Nation* – the largest circulation daily newspaper in Kenya – and through NTV, which is one of the country's largest television stations.

22 *Animal Politico*, *Nieman Journalism Lab*, last updated: June 12, 2014, <http://www.niemanlab.org/encyclo/animal-politico/>.

23 *The Nation Newsplex*, www.nation.co.ke/newsplex/.

Critics say tech/data reporting is not helping profitability

In designing their tech/data push, funders had hoped that a “build it and they will come” approach would work. They did not try to first look at whether the innovations would be effective or make any money or what other impact the journalism would have. The consensus now is that the impact has not been proven and that benefits have not yet appeared on the bottom line.

“We believe we need to develop even further a business case for data journalism and digital storytelling. The assumption that ‘if you build it they will come’ is not working, as newsrooms are under so much pressure that they have not prioritized data journalism with its relatively high costs and substantial skills required,” says Castro, from the Gates Foundation. “In donors’ excitement to embrace the open government and open data movement, they have pumped lots of money into the quickest, cheapest and flashiest path to data journalism: boot camps, hackathons and conferences. Yet these approaches boil down the barrier to data journalism into one simple problem: technology. These boot camps are designed to provide technology solutions, with the tacit assumption that the rest will follow, but they have misdiagnosed the essential root problem. It’s not the tools, at least not primarily.”²⁴

Will funders turn away from funding data journalism and its tools? The supporters of these innovations hope not. “There is a groundswell of data journalism but I do get concerned that funders aren’t willing to give it enough time for it to take hold. There is something fundamentally important about getting these stories out there because they are not getting told otherwise,” said Ben Colmery, former director of the International Center for Journalists’ Knight Fellowships Program.

At a time when the limits to naming and shaming are all too clear, it is simply not certain whether the reporting described above will have a clear impact on government policy or corporate behavior. Even so,

24 Constantaras, Eva (2016). OpenGov voices: Why data journalism tries, and fails, to go global, *Sunlight Foundation*. <https://sunlightfoundation.com/2016/02/10/opengov-voices-why-data-journalism-tries-and-fails-to-go-global/>.

the new tools and new methods of data and digital reporting are now better understood and used more frequently than they were before. Indeed, looking back at ten years of donor-driven attempts to promote tech and data reporting in newsrooms of the global South, it is clear that the tools are being used and that some elegant and sophisticated reporting has been the result. What has not been proved is whether these kinds of data-driven stories create more impact than any other kind of investigative reporting, produce lasting audience interest or engagement, or will help with the biggest problem of all: funding for quality reporting.

We gratefully acknowledge Chloe Oldham for her research and thank our interviewees for taking time to speak to us.

References

- Cooley, S., & Jones, A. (2013). A forgotten tweet: Somalia and social media. *Ecquid Novi: African Journalism Studies (Routledge)*, 34(1), 68–82. Retrieved from: doi:10.1080/02560054.2013.767425.
- Cust, J., & Mihalyi, D. (2017). The presource curse. *Finance and Development*, 54(4). Retrieved from: <http://www.imf.org/external/pubs/ft/fandd/2017/12/cust.htm>
- Howard, A.B. (2014). The art and science of data-driven journalism. *Tow Center for Digital Journalism*, Columbia University. Retrieved from: <https://academiccommons.columbia.edu/catalog/ac:zcrjdfn317>
- Lewis, S. (2011). Journalism innovation and participation: An analysis of the Knight News Challenge. *International Journal of Communication*, (5), 1623–1648. Retrieved from: <http://sethlewislewis.org/wp-content/uploads/2014/10/2011-Lewis-2011-IJoC.pdf>.
- Moyo, D. (2009). Citizen journalism and the parallel market of information in Zimbabwe's 2008 election. *Journalism Studies*, 10(4).
- Paterson, C. (2013). Journalism and social media in the African context. *Ecquid Novi: African Journalism Studies*, 34(1), 1–6, DOI: 10.1080/02560054.2013.767418.
- Schiffirin, A., Robinson, J., & Grennan, K. (2015). Publishing for peanuts: Innovation and the journalism start-up. *Open Society Foundation's Program for Independent Journalism*. Retrieved from: <http://www.cima.ned.org/wp-content/uploads/2015/11/PublishingforPeanuts.pdf>.
- Smyth, T.N., & Best, M.L. (2013). *Tweet to trust: social media and elections in West Africa*. Paper presented at the Sixth International Conference on Information and

Communication Technologies and Development, New York, NY, USA. Retrieved from: <http://mikeb.inta.gatech.edu/uploads/papers/tweet.trust.pdf>

Steenkamp, M., & Hyde-Clarke, N. (2014). The use of Facebook for political commentary in South Africa. *Telematics & Informatics*, 31(1), 91–97. Retrieved from: <https://www.sciencedirect.com/science/article/pii/S0736585312000755>