DATA JOURNALISM IN ASIA

A COLLECTION OF ARTICLES FROM MEMBERS OF
THE SOCIETY OF ASIAN JOURNALISTS (SAJ)

EDITED BY: SIMON WINKELMANN

Konrad
Adenauer
Stiftung

Data Journalism in Asia

A collection of articles from members of
the Society of Asian Journalists (SAJ)

Edited by: Simon Winkelmann

CONTENTS

FOREWORD

This book on Data Journalism is the second book project undertaken by the newly formed Society of Asian Journalists (SAJ).

SAJ, the alumni association of Konrad Adenauer Asian Center for Journalism (ACFJ) at Ateneo de Manila University in Manila, Philippines, is pleased to work with KAS Media Programme Asia. Without this support, this endeavour would not have materialised.

The role we, as alumni, played here are by being active contributors of articles on the same subject; all six of them, whose works invariably form the core content of this book. These articles are in effect country reports on how data journalism is being practiced and written with inside knowledge.

Data Journalism, being a new trend, is a new field that is increasingly being harnessed by journalists and media houses to tell a compelling story in this modern interactive age; whose access to information is only restricted by the extent of internet connectivity but not constrained by censorship imposed by several restrictive regimes.

Similarly, our first book entitled "The social media (r)evolution? Asian perspectives on new media" launched last year, is a compilation of 13 articles written by alumni that discuss social media developments and trends in Asia.

Inside, eleven alumni share their views on social media issues based on their local knowledge and hands-on experience in their respective countries.

Both these two SAJ undertakings involved alumni playing the active role as contributors submitted their articles. We do hope that as we embark on the next project the SAJ office bearers and alumni will be more involved to deepen our support of ACFJ, our alma mater, in the area of education and training; enhancing skill sets and upgrading competency of the journalistic fraternity in general.

Our hope is that knowledge imparted from this book will engage journalists to embrace the exciting phenomenon - data-driven journalism - that has come to be acknowledged as one of the most important trends of journalism for the years to come.

At the recent World Journalism Education Congress (WJEC), data journalism was one of about 10 topics discussed reflecting the significance it played in the changing media landscape.

To briefly understand what this discipline - data journalism - is all about, it seems appropriate to quote an extract taken from The Handbook of Data Journalism[1].

"What makes data journalism different to the rest of journalism? Perhaps it is the new possibilities that open up when you combine the traditional 'nose for news' and ability to tell a compelling story, with the sheer scale and range of digital information now available."[2]

Here, a word of appreciation is called for to acknowledge the efforts of all parties in producing this book. We commend alumni who shared country perspectives with their written contributions. Special mention is due to Konrad-Adenauer-Stiftung (KAS) for publishing the book and ACFJ for invaluable guidance.

I shall not fail to mention Simon Winkelmann, the research associate of KAS Media Programme Asia, for the many hours expended putting together and editing this volume. Two noteworthy personalities are the former Director of the KAS Media Programme Asia, Paul Linnarz, and the incumbent ACFJ Executive Director, Dr. Violet Valdez. Both have provided feedback in all aspects in the production of this book.

As my closing remark, I like to express my gratitude to my fellow alumni for their willingness to spare some of their invaluable time to pen the articles that illuminates how data journalism is shaping informed choices and being practiced in their home countries.

Happy reading!

K.Y. Pung
President, Society of Asian Journalists (SAJ)
(2012-2013 term)

---

1   http://datajournalismhandbook.org/

2   Ibid

SETTING DATA FREE: MALAYSIANS TOY WITH DATA JOURNALISM

BY SUSAN TAM

Khairil Yusof like many other Malaysians that day was barred from going into Kuala Lumpur. He, like his fellow citizens were also banned from wearing yellow on that particular day. The day in question was July 9, 2011, the day of a massive protest led by the electoral reform group, *Bersih*[1]. The demonstrations were banned by the authorities and Malaysians were warned against going into the capital where the gatherings were taking place. Anyone entering the city was not allowed to wear yellow, because it was associated with *Bersih*, better known as the Coalition for Clean and Fair Elections.

Khairil felt that there was something wrong with the country, especially when Malaysians were not allowed to exercise their freedom in moving around their own country, what more in deciding the type of t-shirt to wear. Khairil did make it to the capital that day to join the rally. But, along with Yuen-Chi Lian, he and other demonstrators were tear-gassed by the riot police who were ordered to disperse the massive crowd that gathered in various parts of Kuala Lumpur. This was a second demonstration held by the non-governmental organisation, which saw large participation from members of various civil societies, opposition parties and Malaysians from all walks of life. The thousands that gathered in the city that day wanted reform ahead of the 13th General Elections.

---

1   More than 20,000 demonstrators gathered across Malaysia's capital on July 9, 2011, demanding electoral reforms in the country's biggest political rally in years. The opposition-backed rally was the culmination of weeks of intense pressure on the government of prime minister Najib Razak to make election laws fairer and more transparent before the 13th General Elections. Authorities took extraordinary security measures to deter the rally by sealing off roads, closing train stations and deploying trucks with water cannons near the Independence Stadium in central Kuala Lumpur, where activists sought to gather. (Source: http://www.guardian.co.uk/world/2011/jul/09/malaysia-opposition-protests-elections)

"We were not very politically active at that time, but when we were tear-gassed, we just had a feeling that something about our rights was not right," shared Khairil.

At the same time, the Malaysian parliament was pushing through a Computing Professional Bill 2011 that intended to regulate information technology professionals and form a national body to register and certify all IT professionals. This bill was heavily criticised for making certification mandatory and for the ambiguous definitions it contained.

The Bersih march and ambiguous legislation were the main factors that led Khairil and Lian to connect with others they met at the demonstration. They felt they needed to be more in touch with how the country was run, simply because it affected their lives and the lives of others. So, together with Swee Meng, the three of them launched Sinar Project.

The team started projects to present public data in usable formats for the public. The data collected was open to students, journalists, government agencies and international organisations. Anyone could use the data for research, reporting or policymaking. These three tech-savvy professionals worked voluntarily on these projects, and hoped that by encouraging their audiences to be more informed, they could improve transparency, governance and citizen involvement in Malaysia.

"The data is there, quite often it's in an unusable format, like in HTML tables and so on. So we decided to make it easier and convert it into the lowest common denominator," Khairil explained in a Skype interview.

By using open source technology, they simply turned the tables into easy to read excel formats so anyone could work on it. Using a process called scraping, this team of programmers wrote simple code to gather the data. The information they 'scraped' could be anything, from government contract values to details of business owners or information about high profile corruption cases.

One of their first projects was to compile a list of Parliamentary Bills that was passed in Malaysia since the 1950s. This was important to educate Malaysians about their rights, making them more aware of how laws were passed in the Parliament, by representatives that they themselves had elected. Malaysians need to understand that they have the power to decide

who represents them as public servants. By having information, Malaysians could be better informed, putting pressure on their representatives to make sure public services were more effective. Khairil himself is leading the Accountable project, which is a web application used to track the misuse of funds and corruption in the government. He uses news reports to track issues and the relationships of people to corrupt practices.

The Sinar Project received international grants to support its operations and works with Transparency International Malaysia. Sinar Project is an example of how data analysis has grown since Malaysia embarked on its digital journey in the mid 1990s. Khairil admitted that they probably would not have gotten so far if they started Sinar Project, say 10 years ago. But, not necessarily hindered by technological developments then.

"A decade ago, it may have been difficult (to do this), not because of the technology or access to the internet. It might have been linked to the status of government agencies going online, or doing things in digital form." He found out that, only as far as eight years ago, the Works Department of Malaysia was still using basic phone cards to track the different vehicles they have. Today, this data is available online.

*The Sinar Project's Accountable initiative tracking corrupt practices
and abuses of power within the Malaysian government*
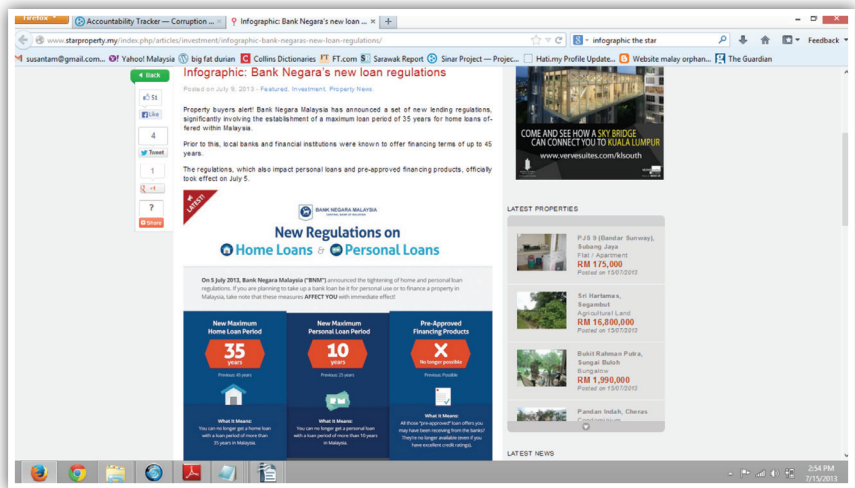
DATA AND JOURNALISM

Having data in one place allows for simple analysis, which in turn helps people to spot patterns. This is useful for investigative reporters working on large amounts of numbers and lists. Patterns help tell stories and highlight issues, which then pressures policymakers and governments to address abuses in public systems and correct imbalances. What Khairil and friends had demonstrated was how easy it was to present large and uninteresting pieces of information into formats that could be used more effectively. But presenting data in easy to read formats in news reports is not a new phenomenon, argued senior journalists and media academics.

"One of the jobs of a print subeditor is to prepare and present news in a format that best tells a story. This may include the use of photographs and graphics such as maps, charts and various forms of illustrations. To make it more interesting to readers we extract information that can be better told through charts and graphs, as well as other graphical forms." Online media and communication specialist Jeswant Singh offered this view after having spent some 20 years with Malaysia's leading English daily, *The Star*. Having been part of the team that started the newspaper's online site, Staronline, Jeswant was familiar with the different techniques of storytelling.

He pointed out that newspapers like *The Star* have been practising data journalism in examples that could be found in the publication's business section. "The annual budget and economic reports come to mind. Also the recent haze reports, although these were pretty straightforward in their presentation."

Freelance writer Pat Fama believed that although the term data journalism has come to prominence over recent years, in a sense all good journalism was about sifting through information in search of stories, and then presenting that information in as interesting a fashion as possible. "The big difference is that when I started working as a journalist, the volume of available information in the public domain was much smaller, and in physical, printed form, rather than online."

"Now, everyone has the sum of all the world's best reference library at their fingertips," shared this former senior journalist with the BBC.

An example of an infographic in English daily, The Star

MALAYSIA AND DATA JOURNALISM

With Malaysians having increased access to the vast amounts of information online, it was only natural that more news organisations employ data journalism in their newsrooms. Based on a study published in this report, Mapping Digital Media: Malaysia, by the Open Society Foundations, researchers found that internet access and mobile phone subscriptions have been on the rise since 2005. In December 2011, fixed-line and wireless broadband penetration reached 81%, while records in 2011 showed that there were close to 18 million internet users, making up 65% of the entire population.

Despite having more access to data online, it was a disappointing display of how data journalism was practised by Malaysian journalists, Fama pointed out. "Data journalism, like all good journalism, is not well represented in the vast majority of the Malaysian media. Journalists, for the most part, do not look for stories, they report what their bosses, and ultimately the government, tells them to." This applied to organisations that were still controlled by the ruling coalition Barisan Nasional (BN) or the National Front.

Agreeing with this observation is the editor Ling Low of *Poskod.my*, an online magazine featuring stories by communities. This unique online space promotes grassroots campaigns and aims to reconnect readers to their neighbourhoods. Ling remarked that it would be surprising if any of the local mainstream newspapers were to practise data journalism, techniques she described as using raw data to be shaped into a story or used in an investigative report.

The lack of data journalism practised in local newsrooms was usually influenced by how mainstream media ownership is structured in Malaysia, as publishing permits restrict the freedom of such newsrooms. BN owned most of the mainstream newspapers and broadcasting outlets[2].

Ling does not see data journalism often in news organisations, but pointed out that online news site such as The Nut Graph, or political analysts Wong Chin Huat, often do this type of analysis. But she was not confident about how data is used, mainly because of its availability and reliability. "Even when people who have a vested interest in getting hold of data will not necessarily know where to get it from," she added. Ling observed from social media messages that the research team behind UndiMsia[3], were struggling to find reliable sets of data for their electoral project.

However, Ling wants her team to use data in their reporting. It would come in handy when *Poskod.My* investigates urban issues like waste or sanitation systems, issues that affect the communities that the readers live in.

The Nut Graph, like many other online news organisations, has been able to thrive in this relatively uncontrolled online space, despite being subjective to the fine print of the law. As part of the former Prime Minister Dr Mahathir Mohamad's pet project - the Multimedia Super Corridor - the government had guaranteed no censorship of the internet. But this without

---

2   Many media outlets are either owned directly by the Malaysian government, such as *Bernama* news wires, or owned by component parties of the BN coalition government, for instance Media Prima Group and Utusan Malaysia by the United Malays National Organisation, and *The Star* owned by the Malaysian Chinese Association.

3   UndiMsia is an initiative to engage young Malaysians and educate the youth about greater participation in the country's democratic processes.

conditions, having laid out in its Bill of Guarantees that, "this does not mean that any person may disseminate illegal content with impunity and without regard to the law."[4]

Fama does find that these online news portals do show some willingness to learn from international best practice. "Malaysiakini, for example, used the vast data made available by the International Confederation of Investigative Journalists and *The Guardian* newspaper to find 1,500 Malaysians with secret offshore bank accounts."

Malaysiakini also presented the complex data of electoral seats ahead of the country's tightly contested General Elections in May 2013. Some of the tools they developed was a seat swing calculator, counting the percentage of how a seat could swing from one coalition to another. Other data that was presented were the number of voters, voters' ethnicity and past electoral wins.

Similarly like Ling, Fama noted that there was a small group of people that used data to present important issues. Opposition politicians, such as Ong Kian Ming, Tony Pua and Rafizi Ramli, regularly use data journalism to expose wrongdoings - in effect doing the work Malaysian journalists should be doing.

Even technology giant, Google, admitted that data journalism was at a nascent stage in Malaysia, particularly when applying Google tools in media reporting. Zeffri Yusof, Communications and Public Affairs manager at Google Malaysia, explained that from time to time, the organisation conducts 'media 101s' to share with practitioners useful and free tools available from Google to assist with their work.

"There is definitely room to develop it further by having media houses allocate more resources and skills development for them to be able to generate their own data driven journalism," he said in an email interview. Zeffri pointed out that the Malaysian press have used and continue to use some of these Google tools to enhance their reporting - Google Earth and

---

4   Under Bill of Guarantee No. 7: To ensure no censorship of the Internet. While the Government will not censor the Internet, this does not mean that any person may disseminate illegal content with impunity and without regard to the law. To the extent that any act is illegal in the physical world, it will similarly be outlawed in the online environment. Hence, laws prohibiting dissemination of, for example, indecent/ obscene or other illegal materials will continue to apply.

Maps imagery, Google+ Hangouts, YouTube live streaming, Google Trends data comparisons, Google Drive and Google Translate.
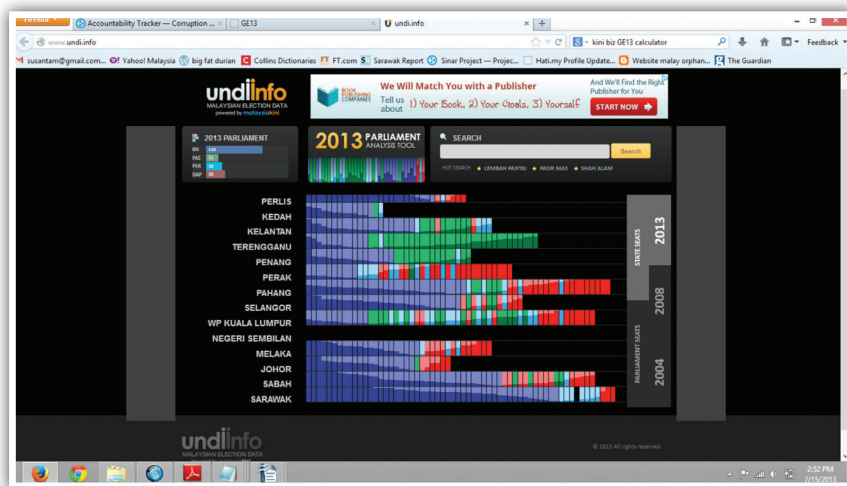
Malaysiakini uses data journalism to present information on the country's election results

NOW EVERYONE CAN BE A JOURNALIST

Politicians, civil society groups and programmers from the Sinar Project could analyse data easily thanks to internet. The question that arises then was, whether this practice would erode the role of the journalists. Would data analysis done by the Sinar Project team replace the work of reporters?

Khairil does not think so. "We want to be neutral; we want to present the data for people to interpret. How they should interpret it, is left for the journalist, not us. We don't think we're the right organisation to be writing stories on it. We would highlight interesting data, but we feel it's up to journalists and civil society to use it and make a stand." The project team was happy to gather data and complement the work of journalists as well as be a tool for reporters and the public, rather than take on the responsibility as a news organisation instead.

He cited work he did to help *Sarawak Report*, which was a project to compile data on construction projects. This project idea originated from that news organisation where a lot of manual digging was done. Khairil helped out and accessed the entire data set so it could be easily used. "We find out, what [Sarawak Report] is doing or Rafizi is doing, anyone

can do it. There is a lot of interesting data out there if you want to find out corruption, but that's not our role. We're just putting out data, making it accessible, highlighting issues that other people could investigate, but n ot us."

Jeswant does not dismiss the idea that anyone should not get involved in journalistic work. "There are some people who are great at analysing data. Journalists could work with these experts through crowdsourcing to get data analysed and published in a more efficient manner or even to collect data."

He pointed out that in 2009, *The Guardian* used this technique to investigate the spending of Britain's members of Parliament after the House of Commons released thousands of MPs' receipts into the public domain. With the help of its readers, *The Guardian* managed to get the data analysed faster than it could if it had used its own journalists.

BACK TO BASICS

Like any trend, data journalism could be just a new way of naming a common journalistic practice. The buzzword could have been a result of how people changed the way they consumed data today, as opposed to 20 years ago.

Ling and Fama agreed that readers' attention spans were shorter these days with so much noise to compete with, particularly in the online space.

"I think the rise of data journalism is down principally to the availability of information, which has increased exponentially over recent years. But the way that information is eventually presented as a news story, is influenced by the way people consume news. The best format for long form news features remains broadsheet newspapers, but fewer and fewer consumers appear to have the attention span to consume news this way," said Fama.

But, it was not about the consumption of content that was driving the interest in Big Data, Khairil argued. Instead, it was driven by an increased political awareness amongst Malaysians. "A decade ago, we were not politically aware because our day to day lives were not affected much." The situation had changed since then as more Malaysians were becoming angry with corrupt practices within the government, leakages of public funds and recognising their civil rights. Malaysians were craving for information and go online where it was available, but often not reliable.

This is where good journalism comes into play, argued the media practitioners. "All the technology in the world cannot instil basic journalistic ethics. If you start from a premise of reporting what the government wants you to, then you cannot expect to be a good journalist," explains Fama, referring to the BN-owned media organisations.

Ling's take on it echoed the words of Janet Steele, Associate Professor of Journalism from George Washington University, who had spoken in a *Poskod.My* event[5] about good content. She found that 80% of shared content still came from news sites, meaning people still go to news sites for credible content. "This makes the need for good writing even more important," Ling said. *Poskod.My* itself promoted good writing skills through a Writers in Progress training to help young writers get the basics right.

Journalists, young or experienced, must not forget then that these basic journalistic skills are part of the profession, whether it involves using data or not.

Jeswant, who also teaches Data Journalism at Monash University's Sunway Campus, explained that journalists have had it both easy and difficult with technology. Journalists no longer have the luxury of time to break a story and must be multi-skilled. Technology has also pressured journalists not to ignore the direct responses of their audience.

"The internet audience is less forgiving and their reaction to bad writing, silly mistakes and weak journalistic practices is almost immediate. And because of the permanency of the Internet, those mistakes will be linked to your name for a long time. At the other end of the spectrum, if journalists do a good job, they will also be remembered - that is branding."

DATA, TECHNOLOGY AND MALAYSIAN JOURNALISTS
So technology helping data to be easily accessible was a great development, so long as it was used properly and ethically. "*The Guardian*, has been at the forefront of data journalism, using it to break important news stories, in as interesting and interactive a way as possible," Fama explained.

---

5   The inaugural Poskod Journalism Campus was held on June 21, 2013, the first day of #Word: The Cooler Lumpur Festival.

And as long as data journalism was seen as a tool to tell the story better, they have their place.

"Rolling television news channels are masters of putting together impressive-looking graphics which add absolutely nothing to the story. More often than not it's about showing off, rather than giving the viewer something extra."

How Malaysian journalism has evolved with technology, depended on its usage. Jeswant and Fama both see that technology was a double-edge sword, offering attractive advantages, but promoting bad practices.

"There is so much stuff out there on the internet which is simply not true. Wikipedia is a wonderful resource, but it should be taken as a starting point, not the font of all wisdom. So much writing on the internet is not just bad, it is blatantly unethical," points out Fama.

Jeswant agreed, he found that Malaysian journalists were clueless on the credibility of the sources for their information from the Internet. The standards of Malaysian journalism should not solely depend on technology. "It has a lot to do with the journalists who use it."

But one thing is for sure, as these experts could agree on was that good writing has to remain at the core of all journalism, whatever the format.

REFERENCES

- Mapping Digital Media: Malaysia, a report by the Open Society Foundations, by Jo-Ann Ding, Lay Chin Koh and Jacqueline Ann Surin, May 16, 2013

- Malaysiakini at Data Journalism: Storytelling in Malaysia with Big Data event, by Malaysiakini CEO Premesh Chandran, April 26, 2013

- Accountable initiative, Sinar Project, http://sinarproject.org/projects/corruption-tracker

- Construction Industry Development Board (CIDB) Database, Sinar Project, http://sinarproject.org/projects/construction-industry-development-board-cidb-database

- Poskod Journalism Campus, http://poskod.my/features/notes-from-poskod-journalism-campus-2013/ from, Notes from Poskod Journalism Campus 2013, July 2,2013

- Malaysia detains hundreds at Rally, The Guardian, http://www.guardian.co.uk/world/2011/jul/09/malaysia-opposition-protests-elections, July 9, 2013

INTERVIEWS

1. The Sinar Project co-founder Khairil Yusof, July 5, 2013

2. Online communications and media specialist Jeswant Singh, July 9, 2013

3. Freelance writer and former senior journalist with the BBC Pat Fama, July 9, 2013

4. Poskod.My editor Ling Low, July 8, 2013

5. Google Malaysia's Communications and Public Affairs manager Zeffri Yusof, July 9, 2013

IN SEARCH OF BIG DATA

BY RAVI BAJPAI

We are flooding the Internet with phenomenal amount of information every day. By one estimate[1], as much as 639,800 GB of data is transferred globally over the Internet every minute. In such a short span, we record nearly six million Facebook views, two million Google searches and a little over half a million tweets, while nearly 30 hours of video is uploaded on YouTube. All this in just a minute. We tend to forget these online activities as time passes. But the digital footprint of each of these actions is recorded on the Internet; formatted and stored in a way it can be retrieved anytime in a fraction of a second.

Information stored on the Internet this way, throws up opportunities like never before for anyone who has access to this huge mine of data, or what is now popularly termed as 'Big Data'. Advertisers are already demonstrating its potential. Many of those ubiquitous advertisements you see in your email inboxes or on social networks every day are not incidental - they are placed strategically based on your interests tracked through your online actions stored in digital data piles.

Journalists too have begun mining this digital repository of data to tell compelling stories, a technique clubbed under the broad practice of Data Journalism, which is now fast gaining popularity over the world. London-based *The Guardian* showed its power during the riots in England in August 2011. Through a well-researched feature, titled *Reading the Riot*s published on its website on August 18, 2011[2], its correspondents could pick out crucial trends in the riots the government was trying to underplay.

They pulled out digital records of England's poverty indicators and visualised them on a map, indicating the poverty indices of different

---

1   Intel: *What happens in an internet minute*. 18th February 2012. <http://www.intel.com/content/www/us/en/communications/internet-minute-infographic.html>

2   The Guardian. *Reading the Riots*. August 18th 2011. <http://www.guardian.co.uk/uk/series/reading-the-riots>

regions using colour. Then, they overlaid on the map the addresses of everyone arrested on charges of rioting, and showed empirically that 58 per cent of the alleged rioters lived in the country's 20 per cent most deprived areas. The story appeared soon after England's Prime Minister David Cameron was quoted in The Guardian as saying, "These riots were not about poverty."[3] The newspaper could also undercut the police's claim that rumours on social media triggered the riots. It retrieved digital records of as many as 2.57 million tweets during the riots to show most tweets were posted after an incident of violence had taken place. Would this all have been possible without Big Data?

The starting point for good data journalism is, quite obviously, finding the right data. Transparency in governance can often have a direct bearing on the availability of data sets. Also, complex data sets can have thousands of data points, like in the case of the 2.57 million tweets *The Guardian* analysed. So data sets should be in a format they can be interpreted and analysed using computer software, requiring minimal manual interference. A country's general level of Internet awareness and penetration can determine how easily and frequently formatted data sets are available to journalists. Indian journalists keen on telling data-driven stories are finding themselves to be restricted on both these counts — availability and formatting of data sets. This is proving to be a major obstacle in journalists embracing the practice of data journalism.

In October 2012, a group of data enthusiasts gathered in the Indian capital of Delhi to build a robust community around data-driven storytelling and mobilize it across the country. The meeting was organised under the aegis of Hacks/Hackers, an international grassroots journalism organisation that has active chapters in many countries[4]. According to its website, its mission is to create a network of journalists (referred to as hacks) and technologist (as hackers), who rethink the future for news and information. Programmers, also called developers or coders, have become integral to data-driven newsrooms, as static or interactive graphics run on

---

3   The Guardian. December 9th 2011. *Data journalism reading the riots: what we know. And what we don't.* <http://www.guardian.co.uk/news/datablog/2011/dec/09/data-journalism-reading-riots>

4   Hacks/Hackers. Viewed on June 22nd 2013. <http://hackshackers.com/about/>

complex computer software are becoming the most popular mode of telling data stories all over the world.

The Delhi gathering was organised by Anika Gupta, a journalist in Delhi, with the aim to start the New Delhi chapter of Hacks/Hackers. During the meeting, the participants discussed a few stories they wanted to explore through data sets, but were unable to make much headway. They simply could not find enough government data on the Internet to experiment with, not even on the common journalistic subjects, says Anika[5]. "One group wanted data on child and human trafficking. Although Interpol maintains some databases on organised crime worldwide, we didn't get the specific data we wanted for India. Data on child trafficking proved impossible to find. There is so much data we just don't have," she says. According to her, the overwhelming takeaway from the meeting was the acute paucity of data sets that are the building blocks for meaningful data journalism.

In India, access to government data is not stonewalled. On the contrary, it is largely open to every citizen. Through the Right to Information Act 2005[6], every Indian can demand access to any information the government has, barring some that could compromise privacy or national security. The legislation mandates the government to provide information within 30 days of receiving an application, extendable in certain cases. But as journalists are often expected to turn stories in quick time, especially those working in round-the-clock news channels and daily newspapers, the problem is not just whether you can access datasets, but also how soon you can get them. For instance, if a story on child trafficking was to unfold today, what are the chances news organisations would wait for a month for the government to release trafficking records and then carry a story? With limited data in public domain, especially online, data-driven storytelling is not picking up at a good pace.

The problem of finding openly available data, or open data, is common to many data-driven initiatives in India. Nisha Thompson, co-founder of a community of data enthusiasts called *'DataMeet',* says the problem stems from the fact that the government uses statistics primarily

---

5   Interview with Anika Gupta.

6   Right To Information Act 2005. <www.rti.gov.in>

as a tool to prepare reports, and not to provide robust data sets for independent analysis. *'DataMeet'* describes itself as a community of data science enthusiasts[7] with more than 500 members countrywide. It counts programmers, activists, students, advocacy groups and journalists among its members. Apart from organising regular gatherings, or what it calls 'meetups', the group has a website and allows anyone to join its mailing list and online groups to discuss and share anything related to data science. It is not strictly data journalism, but data-driven storytelling and services. Nisha says the government does provide statistics, but not in ways that people can understand. "They do have reports that go out constantly but they are filled with jargon and are hard to understand. Ministries and even businesses have tons of data but they don't share it in a usable fashion. The end goal for them is to make a report, not to make the information public. You can get a report really easily; they are all available online and for free. But the data itself is not. Organisations don't have it worked out as part of their process to provide the data," Nisha says.

Open data is hard to get in India, and the government acknowledges it too. It woke up to this fact last year and decided to slowly make its data repository available more easily to people. It implemented the National Data Sharing and Accessibility Policy 2012, or what it informally refers to as its open data policy. The Department of Science and Technology took one-and-a-half years to frame the policy before it could be rolled out in 2012. Broadly, the document recommends every government department should voluntarily publish the statistics it collects regularly. It does not make releasing data mandatory for departments. Statistics collected are collated on the government's new data portal, www.data.gov.in. A look at the portal would illustrate why data journalists complain that open data is not available in India. As on June 22, 2013, the portal had 2627 datasets from 34 government departments. Compare that to its US counterpart, www.data.gov, which had 75,713 data sets; and the UK portal, www.data.gov.uk, which had relatively fewer, 9529 sets. The US data portal was launched much earlier than its Indian counterpart, and given America's high Internet literacy and penetration, the difference in numbers is explicable.

---

7   DataMeet. Viewed on June 24. <http://datameet.org>

But that does not take away from the fact that open data is indeed hard to come by in India.

The comparison between the data portals is just to illustrate the problem of paucity of data in India, not least to undermine the Indian government's efforts to open it up. Neeta Verma, Deputy Director General in the Ministry of Communications and Information Technology, is spearheading these efforts. She explains the government's thinking behind the data portal[8]- "Since we have data, we thought let's increase its usage by researchers, academia, journalists and the civil society. Data transparency is increasingly being associated with transparency in governance these days. In India, open data can give insight into government functioning and contribute to policy making. Data reveals information that people cannot think of." Verma says they are looking beyond just simple analysis of the data they put out. "We want users to create mobile apps from our data. A lot of information the government releases doesn't reach the needy and the end user. Such apps will also help in social audit," she says.

A team of 15 publishes information on the Indian government's data portal. Different government ministries can choose which data they want to release and when, with the data portal managers having little or no say in this process, at least on paper. But Neeta Verma says they have worked out a system that allows users to posts requests for specific data sets on the data portal. Once 100 users endorse a particular request, data portal managers contact the ministry concerned to have the data released. That again leaves journalists with the problem of accessing data on a quick turnaround time. Despite the limitations, for many data enthusiasts the data portal seems to hold out a lot of promise. Nisha Thompson of *'DataMeet'* says the portal is emerging as a potential source for data sets.

While evaluating how conducive is the Indian open data landscape for journalism, it is imperative to put the question of data availability in the global context. In March 2010, digital culture organisation SETUP based in Utrecht, Netherlands put together an event called 'Hacking Journalism', to encourage greater collaboration between programmers and journalists. It

---

8   Interview with Neeta Verma, Deputy Director General, ministry of informaion and technology, Government of India

was a 30-hour 'hackathon' where participants were organised in groups, with journalists using their skills to spot and structure a compelling story while the programmers worked on software to visualize the story output. A book published later, 'Data Journalism Handbook'[9], noted a key takeaway from the gathering: "Almost all projects stalled when searching for information. Most of the time, they began with a journalistic question. But then? What data is available? Journalists usually know where they can find information when doing research for an article. With data journalism, most journalists don't know what information is available."

The global experience would suggest Indian journalists are not alone in the constraints they face while embracing data-driven storytelling. But quite a few news organisations in the West have been able to demonstrate the power of data stories within these constraints. By contrast, the practice of data journalism in India has largely yet to see path-breaking pioneering works that could provide the impetus needed to popularise it. Most big news media outlets use data and statistics to build or support stories they do, or what is traditionally also referred to as precision journalism[10]. However, rarely do these news outlets focus on data journalism as a separate discipline. Data-driven storytelling is a technique that requires a fair amount of learning and training before one can practice it. Without the backing of media employers, it is difficult for traditional journalists to embrace it rigorously.

While data storytelling is not a popular journalistic practice in India yet, interest around data and its potential to tell stories is picking up. One of India's leading media companies, the India Today Group, hosted a two-day meet called 'GEN Hackathon' in the national capital of Delhi this May[11]. Participating teams from other media houses competed to use data in new ways to tell stories. *Mint*, a popular national business daily, won the

---

9   Data Journalism Handbook. Viewed on June 22nd 2013.
    Harnessing External Expertise Through Hackathons. Jerry Vermanen.
    <http://datajournalismhandbook.org/1.0/en/in_the_newsroom_6.html>

10 Data Journalism Handbook. Viewed on June 22nd 2013.
    Data Journalism In Perspective. Liliana Bounegru.
    <http://datajournalismhandbook.org/1.0/en/introduction_4.html>

11 <http://www.globaleditorsnetwork.org/editors-lab/new-delhi/>

competition with its application[12] that allows users to interact with data on India's slum household survey. Cordelia Jenkins from *Mint* along with the newspaper's art director and a programmer built the app.She says the app is a platform for users to find their own stories. The full version of the app is still under construction.

"The idea was more to create a tool that people could use to find their own stories and then to link it with reporting that Mint had already done. This particular project was envisaged in response to the competition. After we won the award, we decided to make it a reality. Data visualisation is still a fairly nascent idea for Mint, as for most Indian news publications. But we have been using it increasingly for the past couple of years. Mint is known for its charticles in the print edition- we run several every week, and really the online interactive graphics are a natural extension of that. As we get better at understanding how to work with data, the projects will become more ambitious, but it's very much a focus for our newsroom now," says she.

If availability of data is the building block for meaningful data journalism, the quality of data sets is perhaps the structure itself. A data set is most useful when it can be easily processed to arrive at conclusions or show trends that may have journalistic value. Most data analytics software requires data to be organised in rows and columns and fed in a digital format. To further complicate this, different software may require the same data set to be organised in different ways for them to be able to recognise the data points. Data journalists may often find they will not get different types of visualisations from a single software, and therefore feel the need to use multiple software.

The most easily computer-readable formats for data sets are CSV, XML, JSON and Excel files[13]. Traditionally, government data in India has been available usually either as PDF or text files reproduced as hard or soft copies handed out to journalists. Small data sets with a few data points can be fed manually into software. But what if a data set runs into thousands

---

12 http://www.globaleditorsnetwork.org/editors-lab/new-delhi/

13 Data Journalism Handbook. Viewed on June 22nd 2013.
    Getting Data From The Web. Friedrich Lindenberg.
    <http://datajournalismhandbook.org/1.0/en/getting_data_3.html

of rows and columns? Take for example the case of *The Guardian*, which analysed 2.57 million tweets for its story on whether rumours on Twitter triggered violence during the England riots in 2011. The robustness of data journalism lies in its ability to present unique journalistic insights by processing complex data sets, which have traditionally been difficult to analyse because of their sheer size and depth. Therefore, data sets must be in the right formats for journalists to extract the full potential of data-driven storytelling. Add to that the need for consistency in data sets. It is difficult to analyse trends if parameters of a data set on a particular topic are not the same for the entire series. Take for instance a data set on child mortality in different Indian states over the last decade. If data for a few states in some years is missing, it becomes difficult to draw an accurate holistic analysis.

On this count too, the experience of journalists in India has been not too good. Anika Gupta of Hacks/Hackers says during the gathering of data enthusiasts in Delhi in 2012, finding data in the desired formats proved to be a big challenge[14]. "When it comes to official Indian government data, much of it is, at least as of now, still released in PDF form, or in various tables with different parameters every time. One of the big challenges for our participants - and arguably the task to which they devoted the most time - was finding, cleaning and formatting their data tables. As you can imagine, it's very time-consuming," says Anika. Her claim is supported by the fact that the government has only recently begun to acknowledge the need for releasing data in the correct formats. In its data portal launched in 2012, all data sets available are in computer-readable formats, mostly either as Excel, XML or CSV files. But with just 2627 data sets on its portal so far, formatted data is in short supply to feed the growing needs of enthusiasts trying to pursue the fledgling practice of data-driven storytelling in India.

The problem of putting data stories in the mainstream appears to be two-way though. While on the one hand enthusiasts complain of paucity of open data, the government says the community must first utilise the data sets available on its open data portal constructively and demonstrate the power of data-driven storytelling. This would provide a stimulus to

---

14 Interview with Anika Gupta

its budding data initiative. Neeta Verma, who manages the government's open data portal, says India has yet to understand the idea of open data and its potential. She points out that if programmers, journalists or others produce projects using its data sets, that will highlight the importance and value of investing time and public money in collating and preparing formatted data sets.

"Unfortunately, that hasn't happened so far. For instance, the consumer price index is being published every month, but people are not using it. The open data portal is a new venture. It becomes a bit of a problem for us when people don't utilise the new service fully. The main trouble is that the concept of open data is not quite popular in India. We are trying our best to spread awareness by organising events and workshops involving journalists and people from different walks of life. We hope this would work," she says.

This view is not isolated. Even those within the data enthusiast community feel it is important to publish in the mainstream a few strong projects based on open data to spread awareness and make the practice popular. Nisha Thompson of *'DataMeet'* says data needs to become a part of every story or it will never strengthen. She says it is important that more journalists take up data-driven storytelling rigorously if it were to become a mainstream journalistic discipline. "We need an effort, primarily by journalists, to really go after and use data in their stories and also highlight when data is not available on important issues. Claims in news stories have to be backed by data and sources have to be shared. Even if journalists don't want to share the data, they should at least make a reference," she says.

The open data landscape in India is still nascent. So the forms, in which it could be put to use, including data journalism, have yet to take concrete shape. The issue of how to make data storytelling a popular journalistic practice has become a chicken-and-egg problem. Open data is in short supply, but so are journalists trained in using it. Most journalism training schools in India too do not teach it as a separate discipline, even though they have full-fledged modules on digital journalism. Then how is data journalism taking roots in India? Much like in other parts of the world, it is taking shape through collaborative efforts of programmers, the civil society and journalists.

In today's increasingly digital world, the civil society and data enthusiasts in India are collaborating to use data for change. Such collaborations usually start informally, with gatherings in different cities where fellow enthusiasts meet and discuss how to build on their common interest, that is, using Big Data. The goals of participants may vary, from forging business ideas to bringing about social change, but they will be achieved through the common platform of open data.

'*DataMeet*' is a case in point. The group is growing fast with members from across the country. It began informally as a Google Group with open membership that served as a discussion forum for anyone interested in big data. The group had its first formal gathering in Bangalore, south India in late 2010, which was followed by a 'Open DataCamp' in February 2011. Co-founder Nisha Thompson says she started the group out of personal interest. "The group moved along and then became a space to have a conversation on data and how people are trying to use it. There wasn't much talk about data in the public domain in India at that time. Developers and programmers form a chunk of our members. We also have journalists, businessmen, advocacy groups, students, citizens and government employees." '*DataMeet*' has so far organised four open data camps in the southern cities of Bangalore and Hyderabad, besides at least 25 regular gatherings across the country, including in the Indian capital Delhi. The participants discuss issues surrounding open data and share their projects and experience.

Hacks/Hackers is another popular community. It has 238 members comprising programmers, journalists, advocacy groups and other data enthusiasts. It has so far organised three gatherings, or what they call 'meetups'. The issues they have discussed in these gatherings include big data, maps and visualisation; and how to improve news through technology. Its website for the 'meetups'[15] describes the community as 'a global collective of people interested in the intersection between news and technology - journalists, developers, designers, product managers, entrepreneurs, students, and many more.'

---

15 Meet Up. Viewed on 29th June 2013. <http://www.meetup.com/hackshackersdelhi/>

Anika Gupta, who co-founded the New Delhi chapter of Hacks/Hackers in October 2012, says she started the group because she saw an opportunity to create the type of community that she would like to work with. "I felt there was a lot of scope to innovate on news delivery in India, since currently we are doing things in our own conventional way. So we try to organise networking events and hackathons, where journalists and techies discuss and innovate new ways of telling stories," she says.

The case of both '*DataMeet*' and 'Hacks/Hackers' would suggest journalists may not be pioneering the practice of data-driven storytelling in India, but are a part of a larger community that is slowly but steadily embracing the technique. Like elsewhere in the world, journalism in India relies on statistics to tell a story. But the idea of using big data for journalism has yet to evolve. This is perhaps partly because of the relatively lower Internet literacy and access in India, when compared to western countries and even many Asian nations. As on June 30, 2012, only about 11.4 per cent of India's population had Internet access, much lower than the corresponding figure of 27.5 per cent for Asia as a whole and 34.3 per cent for the world[16].

Many significant developments in the open data landscape, including the launch of the government's open data portal and the formation of countrywide data enthusiast communities, have taken place only in the last two years. The prospects of data journalism in India look bright, now that the momentum for data-driven services has picked up at a good pace.

---

16 Internet World Stats. Viewed on 29th June 2013.
    <http://www.internetworldstats.com/stats.htm>

DATA JOURNALISM IN THAILAND

BY BRUCE AVASADANOND

We are living in a time of unprecedented speed with an overload of information. Making it simple to understand data is a key component of what today's journalists must do, no matter where they are in the world. With a great deal of news, readers today want something that they can pick up and understand straight away, sometimes without even having to read the entire article. As the saying goes: "a picture is worth a thousand words."

As more and more people start accessing news on their cell phones, iPads and tablet PCs, visual data are becoming more and more important. Many Thais, for instance, read the latest development on Twitter and Facebook, so infographics make it easy to grasp the main idea without having to read the entire article. Because of Bangkok's notorious traffic, many people pass time stuck in traffic by catching up on what is happening in the world. On Bangkok's skytrains and subways, it is common to see people concentrating on the content found on their smart phones and tablets.

Data journalism, or data-driven journalism, is a relatively new term which is gaining more traction in news rooms all over the world. Amid incessant changes occurring in our societies and augmenting competition that traditional media have with online sources, coupled with a declining readership, the media have had to find new ways of attracting and retaining ever-fickle consumers of news. Plus, the amount of information and data available to journalists and reporters can, at times, be daunting – especially with complicated government statistics, diverse qualitative-based data from NGOs and UN agencies as well as hundreds and thousands of diplomatic cables released by Wikileaks' Julian Assange and his team, as well as confidential US intelligence due to Edward Snowden. Journalists and the public are, in a nutshell, swamped with facts and numbers. With an overload of information, a journalist's role is to help the public make sense of everything.

However, the majority of journalists are not experts in statistics, economics or other specialized fields. Moreover, journalists with decades of experience in reporting, often times are not well-versed in modern technology and are not necessarily familiar with software that younger journalists, born into the digital era, can easily use.

Regardless, the arduous task of translating and simplifying this constant flow of information lies on the shoulders of journalists who represent the "fourth estate". It is also simply a way to differentiate one paper from another and ensure that readers will come back for more. Also, readers now expect that newspapers and media outlets present facts using infographs because this is what they see in newspapers, on the Internet and on TV and have become familiar with.

DATA JOURNALISM IN THAILAND

As in any country, Thailand has its fair share of difficulties and challenges that range from corrupt politicians to social issues such as teen pregnancy, abortion as well as religious scandals with Buddhist monks who engage in inappropriate sexual behavior and use the public's donations to buy expensive brand-name products and fly in private jets.

What the government says does not always represent the entire picture. Being responsible for ensuring transparency, many Thai journalists have combed through official documents and investigated these claims in order to verify and often times to refute what officials have stated. Another problem is gaining access to such data and verifying the authenticity of information that they obtain. Despite Thailand's official Access to Information Act, as the case studies below will illustrate, government officials do not always provide the data that journalists are looking for or need to run their stories.

WHAT IS DATA JOURNALISM?

Paul Bradshaw from Birmingham City University writes that data journalism "is journalism done with data"[1]. While Jonathan Stray from the University of Oregon defines it as "… obtaining, reporting on, curating and publishing data in the public interest"[2].

---

1   http://datajournalismhandbook.org/1.0/en/introduction_0.html

2   http://journalism.uoregon.edu/journalist_in_residence/?p=36

It can either be a source of news or the use of such data, such as statistics and other qualitative data, which are presented of in a way that makes them easier for readers and viewers to interpret and understand complex information. More and more stories rely on "infographics" with illustrations and colours that help to attract people's attention. Many of these graphs are similar to flow charts as well as they contain arrows linking one point to another. In the end, the key is to simplify information and make it easy to understand.

With advanced computer graphics and skilled graphic designers, both traditional print media as well as online news sites are incorporating more and more visual elements to attract readers. This paper will present three case studies of three different news media and how they have incorporated data journalism into the way they present news. In particular, these cases will explore how some of Thailand's leading journalists rely on and access government data and statistics and present them to the public. Nevertheless, they encounter some barriers in accessing such data despite the existence of the Access to Information Act in the Kingdom. Through their investigative work and connections, they have been able to bypass the red tape found in Thailand's bureaucracy in order to ensure that the government is transparent and accountable.

Data was collected through interviews with three different news organisations, including those who currently and formerly worked at these media outlets: Isra News Agency, Thai Public and The Nation.

Case 1: Prasong Lertratanawisute –*Isra News Agency*
http://www.isranews.org/
Prasong Lertratnawisute has been a news reporter for many decades. He was previously based at *Matichon* where he spearheaded an investigative story on how the former Prime Minister Dr. Thaksin Shinwatra concealed his wealth through the use of nominees. Using data he obtained from his sources, Lertratnawisute was able to show that the former leader transferred shares and money to the accounts of his maids and drivers. Using data journalism, he was able to present the complicated links among those close to Shinawatra in a map.

One section of the *Isra News* website is devoted to and focuses on investigative news stories such as information on well-known people's

tax returns. *Isra* also provides a database of basic information about companies, employment records as well as details of board members of different companies. From such data, he can see if large companies and rich individuals have used nominees in their businesses. There have also been cases in which a farmer has many tens of millions of baht, for instance.

With such rich and diverse data, journalists who have an eye for detail and have the time to draw links among a given set of information, can double check details from one data set with another. In addition, official government data and company registration documents can be cross checked to see if the information can be verified. Lertratnawisute relies on such data to write many of his stories.

As for infographics and visual representation of the data, Isra does not use them much given the fact that his office is a small independent news agency, so they do not have sufficient budget to hire a dedicated graphic designer like other large news outlets.

Lertratnawisute also explains that data journalism is not new since they have used tables and graphs in their news stories even before the introduction of the Internet.

Nevertheless, he says that the presentation of data using infographics is something which many journalists do not know how to do since they did not receive prior training. During his years at *Matichon*, he did use table and charts before; however, nowadays the focus is on incorporating technology and computer software to make these illustrations more attractive. Given the changes taking place, Thai journalists today have had to learn hands-on how to incorporate them into their news stories, something the younger generation would be more experienced in, compared to those who have been in the industry for many decades.

He adds that in the past, journalists had to use a pencil and an eraser. Today, Power Point and technology comes second nature to the young generation who are highly tech-savvy.

While the aim of infographics is to make stories clear to understand, Lertratnawisute is of the opinion that in certain cases, the design makes it more difficult to understand. When he was with *Matichon*, he would make a sketch of how he wanted the infographic to look like and then work with an artist or graphic designer who would turn his ideas into the final product. Even though he did not know how to design the infographics himself, he

still had a part in what the infographic would look like.

Most importantly, he believes that clarity is the key. For this reason, whatever the information is, it should be presented in some kind of order and connected in some way, such as in a network, so readers can have a better understanding of what is being described. In other words, readers must be able to pick up the overall message of the infographics. What it should not be is overly complicated with too many details.

Lertratnawisute also asserts that journalists today must be creative and have new ideas. News should be presented in a colourful and organised manner and not be written as what he refers to as "dry news."

He concludes by stating that *Isra News* would add more infographics if he receives additional funds.

Case 2: Boonlarp Poosuwan, Editor-in-chief, *Thai Publica*
http://thaipublica.org/

Poosuwan says that her online news outlet finds data to support stories that they are covering. *Thai Publica* focuses on doing a series of stories that are investigative in nature. Reporters at her online paper have to have access to data in order to back up what they find in the field and from interviews. Most of the data collected are from first-hand accounts that have been disseminated. What is said is then cross-checked in order to verify its authenticity and accuracy.

Sources of data include the Bank of Thailand and public agencies such as the Office of the National Economic and Social Development Board (NESDB) which are involved with stories they are working on. Poosuwan states that accessing information from the government tends to be more challenging. However, with existing connections, they are able to obtain the information required by asking those who they know in these organisations for information they require or to verify data.

Poosuwan further explains how complicated it can be to gather data from the government. One story in particular clearly illustrates this: the Thai Government's G2G (government-to-government) export numbers. The "official" numbers that are released do not always reflect reality. Moreover, while the Thai Government claims to have sold rice to other countries' governments, they do not disclose the real numbers or provide any concrete details such as the names of the buyers. Officials claim that the deals are "confidential." The fact of the matter is that rice that

is exported and sold abroad must go through Thai Customs who must record any sales transactions; however, when *Thai Publica* requested this information, Customs claimed that they have no data to share. She says that on many occasions, officials simply do not give the Thai public any useful or relevant information.

Once *Thai Publica* is able to obtain verifiable data, they will then present them in infographics which Poonsuwan says is quite a new approach for Thailand. She has received commendations on her stories from Thai academics, researchers and students. The use of infographics helps to make it easier to understand these issues because of the evidence that is presented visually instead of verbally.

Poonsuwan feels that the Thai Government should make official government data available on their websites and that such information should be automatically uploaded on the Internet. This would allow journalists to provide checks and balances and to do their job more efficiently. The public is entitled to know, for example, how public funds are being used. Another suggestion concerns the Thai Parliament: it should be clear and verifiable which member of parliament travelled abroad, where they went and for what purpose. This type of information should be readily accessible and made public online in order to ensure transparency.

Lastly, Poonsuwan explains that to be proficient in working with infographics, practice makes perfect. At first, she was not familiar with using Excel, for example, but she learned how to use it by herself and became better overtime. In general, she says that before journalists were trained to only write news. Nonetheless, the world is changing so journalists have to acquire and learn new skills in order to compete and catch up with changing trends.

Case 3: Jeerawat Na Thalang, former journalist at *The Nation*
www.nationmultimedia.com

Na Thalang was a former editorial writer at *The Nation*, one of Thailand's leading English-language newspaper.

She explains that data journalism is very useful when used to help clarify complicated issues, such as the Thai Government's pubic policies. Thus, *The Nation* decided to include colourful animations on its website and use infographics to help clarify these complex issues.

These infographics "look like cartoons," and help readers better understand the large amount of numbers and the connection of one stakeholder to another. It helps to simplify the issues and make it easy to understand. In addition, infographics also help to attract readers as they become the article's focal point.

One example would be the Thai Government's controversial rice pledging scheme. For instance, infographics allowed readers to easily see the differences in percentage between market prices and inflated prices paid by the government. The gap, which is quite large, can be more clearly illustrated using images rather than words as the effects are more graphic. The graphics reveal that there is something wrong with the logic behind this pledging scheme, as the margin is much higher than current market prices; thus, nobody would purchase Thai rice at such inflated prices. This example is from the beginning of Thai Prime Minister Yingluck Shinawatra's year in office when this policy was just introduced, so not many people were familiar with it yet.

When the reporter responsible for the story received the data, the information was presented to him/her in raw numbers. The reporter then had to do some calculations in order to "translate" these numbers into something that readers can understand and relate to. In certain situations, using a simple pie chart or bar graph might serve this purpose. However, with modern day technology and graphic artists, the end result is often much more elaborate. While in the past, the respective story writer would also be responsible for any accompanying tables and graphs, today many newsrooms have a separate individual or department that deals directly and solely with illustrations in the form of infographics and other attractive and creative ways of presenting data. For this reason, this new position of a graphic designer has emerged and is growing in importance, perhaps even as important as the journalists themselves who research and write these stories. Without proper illustrations, the stories that are written might appear to be "dry and boring" and not garner the necessary interest from potential readers.

Graphic designers at *The Nation* focus on illustrations and design and do not have a role in reporting or writing. The vast majority of them do not know English very well. The graphic designers and journalists must, however, work closely together in order to ensure that what is presented

is in line with the story. There must be a clear dialogue between different members of the newsroom – in some cases, the graphic designer will propose a possible illustration or, in some cases, the journalist might already have something in mind and can propose possible approaches and ideas, which the graphic designer will then carry out. The main graphic designer at *The Nation* has also become very popular because of his work and has even been invited to talk about his work and lecture about graphic design.

Infographics have really come into play and become more of a vital part of how news is presented today in the last four to five years. With increased and relentless competition from the Internet and very fickle readers who have less and less time, illustrations, colours and content are of vital importance when it comes to attracting and retaining readers' interest, whether it be in print or online.

Research has also been made into where people look at when they visit a website. Na Thalang explains that there is scientific proof and evidence that most people will look at pictures first rather than at headlines. They will read the text last.

Infographics have emerged as an important story telling tool, because they are able to convey the writer's main message and the essence of the news story. Na Thalang says that infographics are so powerful that now practically all newspapers and websites in Thailand, and around the world for that matter, use them. A clear example she provides is *Time* magazine which has emphasised the use of infographics, especially in the past three years.

The policy to incorporate more infographics and visual messages was something designed by the newspaper's management. As with more newspapers around the world, *The Nation* is experiencing a stagnant readership; therefore, they needed to make their paper more attractive with varied fonts, vivid colours and large photos along with infographics. Reality is that more readers who read in English are those who prefer to read online more than the print version.

By having a successful infographic or illustration, it will create a buzz and become the "talk of the town." People will talk about it, share it with their friends and also press "like" on Facebook. With more people viewing it online and the more times it is shared, this helps the newspaper create more visits to its website. In the end, this would have an impact on its

advertising revenue. Therefore, data journalism also has a financial incentive to it.

CONCLUSION

With increased popularity of Twitter, Facebook and Instagram, more and more users, especially the digital natives, choose to access news and information from social media. As a result, many news media have also made their stories available on these websites with links directed back to their homepages. The only reason why a reader would click on the link is if the topic and illustration is attractive enough.

People no longer accept things at face value. Readers want to know more than the simple facts, so data journalism provides additional support and lends increased credibility to a particular story. Also, pictures and infographics, in certain cases, are clearer than words.

With haste, errors will occur. The key is to balance speed with accuracy; therefore, journalists should also remind themselves to double check and ensure that what they present is accurate, because ultimately a journalist's duty is to present facts. Today, these facts can be presented not only through words but also via a visual medium.

DEFINING THE PRACTISE OF DATA JOURNALISM IN THE PHILIPPINES

BY ERWIN OLIVA

In 1993, Eric Guiterrez of the Institute for Popular Democracy wrote a book titled *"The Ties that Bind: A Guide to Family, Business and Other Interests in the Ninth House of Representatives."*[1] It was the first attempt at using data acquired from public records to understand the "tangled web of family business connections that put" members of Congress "in potential conflict-of-interest situations."[2]

"What was little known is that Eric had voluminous information and he didn't know how to manage it," recalls Yvonne Chua, former training director of the Philippine Centre for Investigative Journalism (PCIJ), as she traces the roots of data journalism in the Philippines that started in the 1990s.

After consulting friends, Guiterrez settled on using the DOS-based spreadsheet program called Lotus123 to do "qualitative" analysis of the data he possessed. "What he did was only sort the data. He didn't apply math back then," Chua adds.

Nonetheless, sorting through Guiterrez' troves of data was a big feat at that time. In his possession were sworn statements of assets and liabilities of congressmen, resumes, congressional profiles from the Makati Business Club, official directories of congress, rosters of legislators; results of the 1987, 1988, and 1992 elections, general information sheets on 120 corporations and articles of incorporation, summary of pending applications for land conversion from the Department of Agrarian Reform, and Congressional archives.[3]

---

1 Arao, Danilo; Chua, Yvonne; and Pabico, Alecks, *The Electronic Trail* (1997) Spreadsheets. Pp 5, 6

2 Ibid.

3 Ibid.

Chua who joined PCIJ in 1995 sought Guiterrez. She then sat down and told him about her plans of doing a sequel to the award-winning book. Guiterrez was about to "relocate" to London when she convinced him to give her copies of his voluminous database, and more.

"I remember they were still in his five and one-fourth floppy disks," Chua quips. "I got everything that he had left," says Chua who was a tech-savvy journalist and an expert in spreadsheet software. She then converted the DOS-based data into a format suitable for the Microsoft Windows operating system.

In 2004, PCIJ published the book, titled "The Rulemakers: How the Wealthy and Well-Born Dominate Congress."[4] It told the story of how the powerful families are elected into Congress. It also exposes how these families use Congress to enrich themselves and entrench their kins into power.[5]

Later, Chua spearheaded an effort to collect more publicly available data to add to Guiterrez' database. This led to the idea of creating a "dynamic website" that would bring all these information together online. Working with a local firm called Adobo.com, the PCIJ transformed these databases into "iSite.ph," an information site about Philippine politics and government.[6]

The development of iSite.ph, however, hit a snag. This did not stop Chua and her team however. They took the daunting task of processing and uploading data onto the site. Thus, iSite.ph's life was short-lived, but Chua notes that this project became one of the first data-driven journalism initiatives in the country.

FROM CAR TO DATA JOURNALISM
Computer-assisted reporting in the Philippines emerged with the rise of newer technologies in the 1990s. Windows 95 was just launched. Computer applications such as spreadsheets and database managers were just

---

4   PCIJ Bookshop, (2004), *The Rulemakers: How the Wealthy and the Well-Born Dominate Congress*, (http://pcij.org/bookshop/rulemakers.html) Accessed on August 7, 2013

5   Ibid.

6   iSite: The Information Site of Philippine Politics and Government (http://i-site.ph/)

introduced as tools for data processing and analysis. Very few journalists were familiar with computers and software applications.

The Internet was also at a nascent stage. Web browsers were still unknown. To access the Internet, tech-savvy journalists and researchers often used open source environments like Linux, says Chua who started training journalists and students on using computers for reporting and research.

In 1997, she co-authored *"The Electronic Trail: Computer-assisted Research and Reporting in the Philippines"*, a handbook for the PCIJ. This handbook introduced computers as tools for making sense of data. It also touched on electronic databases and the web as tools for reporting news and doing research.[7]

Chua says the handbook was created to allow her to save time and resources required in hands-on trainings for computer-assisted reporting. Founded in 1989 by a group of journalists, the PCIJ has been a proponent of data journalism because it wanted to promote transparency and accountability in government. Launched in 2001, the iSite.ph website was a result of the organisation's advocacy.[8]

Through iSite.ph, PCIJ collected and published pertinent data about the members of the House of Representatives, "which were not readily available" online.[9] It also offered practical tips and advice aimed at educating citizens on how to obtain and secure public documents.

iSite explained structures in government, as well as the assets of officials and local budgets.[10] It became an online resource that gave the public a rare collection of government data.

Using its database, the PCIJ has penned various stories, including the "Open for Business"[11] report, which revealed how owners of big businesses and politically motivated families dominated positions in Congress.

---

7   *PCIJ Online Bookshop*, http://pcij.org/bookshop/etrail.html (Accessed on July 30, 2013)

8   *The Information Site on Philippine Politics and Government. About iSite.ph*
     http://i-site.ph/about.html (Accessed on July 30, 2013)

9   Ibid.

10 Ibid.

11 Coronel, Shiela, *Open for Business*,
     (http://i-site.ph/Analysis/business.html) Accessed on July 30, 2013

Since then, the PCIJ has been producing data-driven special reports to explain complex political and social issues. Some of these stories earned international citations.

In 2013, the Global Editors Network gave honourable mention to PCIJ under the Data-Driven Investigations Small Media category[12] for its "The Wealth of the Gods of Faura" series. The series looked into a database containing the Supreme Court Justices' statement of assets and liabilities, which was among the most difficult but in demand data from government.[13]

In 2012, the PCIJ qualified as a finalist in the same award for its "Opaque LGUs the norm in NCR" report, which chronicled the organisation's struggles to obtain public data from various government sources, despite laws allowing citizens access to government documents.[14]

In 2011, PCIJ also started a data journalism project called MoneyPolitics[15], which was designed as a "resource, research and analysis tool on elections, public funds and governance in the Philippines."[16]

Receiving a $100,000-grant for three years from the Open Society of Foundations, the project is now home to more than 6,000 unique public documents and 57 gigabytes of digitised content collected over the years since its establishment in 1989.[17] The site also offers a rich collection of databases that are divided into sections:[18]

---

12 Global Editors Network, *Data-Driven Investigations Small Media Category*, http://www.globaleditorsnetwork.org/dja/ (Accessed on August 6, 2013)

13 The PCIJ Blog, *The wealth of the "Gods of Faura,"* (December 9, 2012), http://pcij.org/blog/2012/12/09/the-wealth-of-the-supreme-court-justices (Accessed on August 6, 2013)

14 Centre for Media Freedom and Responsibility, Chronicle (PJR Reports May-July 2012) http://www.cmfr-phil.org/2012/07/26/chronicle-pjr-reports-may-july-2012/ (Accessed on August 6, 2013)

15 MoneyPolitics: A Citizen's Guide to Elections, Public Funds, and Governance in the Philippines (http://moneypolitics.pcij.org/)

16 MoneyPolitics, Ibid.

17 MoneyPolitics, *The Making of MoneyPolitics,* http://moneypolitics.pcij.org/stories/the-making-of-moneypolitics/ (Accessed on August 6, 2013)

18 MoneyPolitics, Ibid.

1. Fact and Features: This holds data-driven reports and facts related to elections, public funds and governance.

2. Public Profiles: This features a list of Elective and Appointive Officials.

3. Campaign Finance: This section highlights one of the most controversial issues in Philippine elections: Who has contributed to the campaign of political candidates. It covers the President down to the political parties.

4. Public Funds: This area focuses on how government budget and spending, including the hotly debated and contested "pork barrel."

5. Elections and Governance: Highlights election results through maps and charts, and candidate listings. This section also offers a searchable database of cases filed against government officials.

This PCIJ website aims to keep records of publicly available data to help promote good governance through transparency and accountability.

"Through MoneyPolitics, PCIJ aims to help citizens appreciate the documents, data, and digits behind stories, issues, and events. PCIJ also offers MoneyPolitics as a reference tool for journalists, students and teachers, civil society advocates, public officials, election regulators, development agencies, and Filipino voters at home and overseas," the website states.[19]

BUILDING CONTEXT FOR BROADCAST NEWS

Apart from the PCIJ, another team came a decade later to push data-driven reporting in the Philippines.

In 2003, broadcasting company GMA Network decided to invest in a team that would provide "value-added" content for its daily news and public affairs programmes. Print journalist Florian Tarcelo-Balmes was hired to lead this group, which was later named GMA News Research. It was placed under the GMA News and Public Affairs group.

Tarcelo-Balmes says that the team focused on providing "supporting content" to the TV network, but it later progressed to producing in-depth reports based on its growing database of public documents.

---

19 MoneyPolitics, About (http://moneypolitics.pcij.org/about-moneypolitics/)

The GMA News Research executive says the team was mandated to acquire and collect data from government and private sources. These were then organised, archived and used to produce in-depth reports for TV, radio, and the web. One of the group's biggest project was an analysis on political clans in Congress.[20]

In 2007, the GMA News Research unveiled PolClan, a political family database that included statements of assets and liabilities of candidates; information on relatives in government; and other information pertinent to understanding the powerful families in Congress. GMA News Research Assistant Manager Karen Tiongson-Mayrina admits that this initiative was inspired by PCIJ's iSite.ph project.

As of 2013, the PolClan database includes information on 480 families, which do not represent all political clans in the Philippines, Tiongson-Mayrina says. Similar to PCIJ's MoneyPolitics, the PolClan database includes data from the Commission on Elections, local government units, the Securities and Exchange Commission, to name a few.

"This doesn't cover everyone. It is a collection of spreadsheets. It is still crude," Tiongson-Mayrina says. The database, however, led to reports revealing a handful of political families occupying key positions in the national and local governments.[21]

"We were able to see how long political clans reigned. It was our edge in our coverage and it became the talking point for discussions in our TV coverage," Tiongson-Mayrina adds.

To help beef up its research and analysis, Tarcelo-Balmes hired social science graduates as junior and senior researchers. She also got a geography graduate to help build the team's geographic information system and maps; and a library science specialist who help build an internal e-library system for various stakeholders in the broadcast network.

Unfortunately, GMA News Research' 10-year database is only available to "internal" users, Tarcelo-Balmes says. Much of what the group publishes on the web are results of their analysis and interpretation of data.

---

20 Tiongson-Mayrina, Karen (July 5, 2013), *55 political families have unbreakable hold on power, one clan for 43 years* (http://www.gmanetwork.com/news/story/316096/news/specialreports/55-political-families-have-unbreakable-hold-on-power-one-clan-for-43-years)

21 Tiongson-Mayrina, Ibid.

"We only release results, not the raw data. The database is owned by GMA," Tarcelo-Balmes explains, noting that the group has adhered to policies of the network.

GMA News Research has made researching easy for its team. It developed the *GMA Quick Search*, an internal search engine, with its information technology arm, according to Senior Researcher Agatha Guidaben. This internal "Google" allows anyone to quickly find government documents and other pertinent information on an internally hosted database, Guidaben adds.

Launched in 2004 and made available to users within the organisation in 2005, the GMA Quick Search has "indexed" more than 30,000 files and documents, Guidaben says. It comes in handy when the group needs to pull data and documents needed for big stories and events like the seasonal Philippine elections.

Over the years, the team has also created "press kits," or fact books that contain basic information about people, places and other related topics needed in reports, Guidaben adds.

Recently, Tarcelo-Balmes says the group invested on ArcGIS software to visualise geographic information system (GIS) data into publicly available platforms like Google Map.

"We're the memory of the news cast. We're the sidebar. We're the context," says Tarcelo-Balmes who stresses that TV by design is a faster medium that focuses on event coverage. Context is often lost in TV reporting, she adds.

With data journalism, the GMA News Research team is now able to put more context into broadcast news, Tarcelo-Balmes says.

DATA AS A 'SOURCE' FOR TELLING STORIES

PCIJ's iSite.ph project was short of being revolutionary in the 1990s, because it put publicly available government data online. "It was an early form of data journalism," says Chua who teaches journalism at the University of the Philippines.

PCIJ also landed a P1-million-grant from the Human Rights Project for iSite.ph, because the intent was to "advocate the right to information," Chua adds.

The PCIJ has been asserting this right to information since it was established in 1989. It was, in fact, the institution that forced the Supreme Court to release the statements of assets, liabilities and net worth (SALN) of its Justices after more than 20 years.

"The request for the release of the SALN was done in 1991. It was only granted by the Supreme Court in 2012," she says. "We would write a request every year."

Now working as Vera Files, a non-profit organisation founded in 2008 by a group of journalists taking a deeper look into Philippine issues, Chua says data is now helping journalists "enhance storytelling."

With more progressive Philippine government agencies making their database available to the public, it is now up to Filipino journalists to learn how to make sense of the data, she says.

Rappler.com, a new player in the online content publishing business, is one of the local media organisations taking advantage of the availability of government data.

During the May 2013 elections, Rappler worked with the Commission on Elections (Comelec) to deliver real-time updates on the election results via the PHVote 2013 project.[22] According to Rappler CEO Maria Ressa, the news organisation signed a memorandum of agreement with the polling body and worked on the site for six months.

The agreement allowed Rappler to receive raw data - in the form of votes from about 50 million voters - coming from more than 80,000 counting machines from polling precincts nationwide. The data, which was consolidated in a mirror site run by the Comelec, reflected preliminary but unofficial results of the Senatorial race[23] during the May 11, 2013 national and local elections, Ressa says. The result was an interactive and real-time tally of votes for senatorial and local candidates - a project that was unthinkable during the 2010 Philippine elections.

Ressa says that the PHVote 2013 combines "big data and traditional data journalism," where stories present facts and figures.

---

22 PHVote 2013, Rapplers coverage of campaigns and elections in the Philippines, (http://www.rappler.com/nation/politics/elections-2013)

23 PHVote 2013, Official Election Results: Senatorial Race (http://election-results.rappler.com/2013/live/senatorial-race-results-official-canvass)

Interaksyon.com, another young online news company, also launched its own database-driven election site that visualised the results of the elections using so-called "heat maps" during the May 2013 elections.[24] Also drawing raw data from Comelec, Interaksyon developed in-house "heat maps" to allow anyone to drill down on the election results for each Senatorial candidate in different provinces throughout the country, Roby Alampay, editor-in-chief of Interaksyon.com, says.

The heat maps showed how people voted during the May 11, 2013 elections in real-time, Alampay says. Behind the heat map was a Google spreadsheet that organised polling data from national down to the city and municipal levels.

Interaksyon also created an "Issue Tracker"[25] designed to help voters decide which Senators to vote. Issue Tracker featured images of all senatorial candidates. Users can click on these images and see how the candidates voted on key and controversial legislations like the reproductive health, divorce bill, freedom of information, and the anti-political dynasty bill.

Alampay says Interaksyon's main purpose for doing data journalism is to enhance storytelling. "At the end of the day, you still have to tell a story," he adds.

Unfortunately, in the Philippines, much of the government data are in "primitive" form, Alampay laments. Sourcing of data is one of the toughest part of data journalism practice in the Philippines, he notes.

Also, much of the government data are in different formats, and are using nomenclatures that vary between agencies. Thus, editors and researchers would still need to do a lot of work closely with programmers, designers and statisticians to verify data. "Since data journalism is about data, we need a lot of editorial guidance for us to tell a better story," Alampay adds.

---

24 Pagbabago 2013, *Who Won Where? Mapping the Results of the 2013 Elections,* http://www.interaksyon.com/pagbabago2013-results/who-won-where/?c_name=poe (Accessed on August 6, 2013)

25 Pagbabago 2013, Issue Tracker, http://www.interaksyon.com/pagba-bago2013/2013-issue-tracker (Accessed on August 6, 2013)

Such limitations, however, did not stop Alampay and his team from launching the website's biggest data-driven project in July 2011.

Working with a government agency, Interaksyon.com developed a real-time traffic update service that pulled data from the Metro Manila Development Authority (MMDA). Dubbed the Traffic Navigator (TNAV),[26] the 24/7 system provided the latest traffic situation every 5 to 15 minutes. Colour-coded updates are displayed using a "system view," a simple yet useful map of the vital roads and highways in Metro Manila; a "line view," a colour-coded snapshot of the traffic situation for various routes; and via the traditional Google map.[27]

A web company owned by broadcast network TV5, Interaksyon.com developed the TNAV as an "iconic" service that showcased a "public-private partnership," according to Alampay. The traffic system is now seen on its website, and it has been drawing thousands of commuters and private car owners who want to know the traffic situation in a given time during the day.

Alampay notes that "visualised data" is an area of data-driven journalism that no one dominates in the Philippines. At this stage, he says that much of what we see are efforts that are barely "scratching the surface."

Interaksyon did one visual project, dubbed "Hacienda Luisita: Land to the Landless," which used an infographic to illustrate the stark contrast between the land owned by a powerful political family and the 4,915 hectares of land granted to 6,296 farm worker beneficiaries under the government's Comprehensive Agrarian Reform Program.[28]

"We can now put Lego bricks (data) together to form a dinosaur. But what we don't have right now are lego bricks," Alampay points out, as he admits that Philippine data journalism needs more skills in the area of "sourcing and generating data," with the latter to mean digitising traditional forms of data.

---

26 Traffic Navigator System View http://mmdatraffic.interaksyon.com/system-view.php (Accessed on August 6, 2013)

27 Ibid.

28 Hacienda Luisita: Land to the Landless, http://www.interaksyon.com/hacienda-luisita (Accessed on August 6, 2013)

Currently, Alampay observes that most data journalism done in the Philippines focuses on "rendering data" using maps and infographics.

CROWD-SOURCING AND SOCIAL MEDIA

Rappler CEO Ressa says her team of researchers work with a technology group to combine the powers of "shoe-leather" journalism with digital news gathering and reporting using infographics, social media, and crowd-sourcing.

Like GMA News Research, Rappler has created its own "research and content strategy" team that focuses on creating stories out of data.[29] Calling itself a "social news network," Rappler by design uses digital news gathering and reporting tools like timelines, infographics, and rich media to tell stories. Its social media strategy is also tied to its digital journalism practice.

As the Rappler CEO puts it, social media allows the news organisation to "amplify" its data journalism and crowd-sourcing strategy in the delivery of news and information to its own audience.

"The social media gives you God's eye view. This gives you the ability to think about real world events predicted by the media," Ressa was quoted as saying in a student media summit in November 2012.[30]

WHY ENGAGE IN DATA JOURNALISM

Depending on the definition, data journalism in the Philippines is still at a nascent stage. But in terms of the practice, it has been evolving since the 1990s after Eric Guiterrez started using Lotus123 spreadsheet software to make sense of volumes of public records that he acquired.

Ressa draws an interesting analogy to doing data journalism. She says it is like "studying terrorism," where data can be used to understand complex issues like charting the money flow in governments to understand points of corruption.

---

29 Austria, Alex, Sending the Ripples Out: A Case Study on Rappler's data journalism practices http://thecarofalex.wordpress.com/2013/02/23/text-summary-sending-the-ripples-out-a-case-study-on-rappler-coms-data-journalism-practices/

30 Austria, Alex, Ibid.

"As journalists, we're there to pull data together. But we also try to help people understand it," she says, stressing that one of Rappler's goals in doing data journalism is to "help build institutions from bottom up."

Rappler has, for one, created a microsite called "Budget Watch,"[31] which is a collaborative project with 19 civil service organisations with the purpose of harnessing various research data sources to understand how the national government works on the annual budget, which is now a "bottom-up exercise."

Ressa says BudgetWatch project is part of the Open Government Initiative espoused by the Department of Budget and Management, as underscored in the 16-point Social Contract of President Benigno Aquino II with the Filipino People.[32] This government initiative outlines the current administration's anti-corruption drive, which is looking at best practices to promote transparent, participative and accountable governance.

Indeed, experimentation is now evident in the practice of data journalism in the Philippines. Interaksyon.com, for instance, launched its Stats of the Nation project[33] in time for the yearly State of the Nation Address of President Aquino in July 2013. It created interactive maps to visualise government data on social and health indicators, including income gaps, poverty incidence and HIV/AIDS infection over a period of time.

The Stats of the Nation website broke down government data and "rendered [them] on Heat Maps."[34] The aim is to challenge what government is saying versus what is really happening.

"On July 22, 2013, President Benigno Aquino III will deliver the State of the Nation Address, one expected to quickly review the first half of his term and chart the course of the last half. It is expected to tout recent positive developments on the economic front, and the progress of major, far-reaching policy reforms. But how are the Filipino people doing, really? Interaksyon.com takes data from official sources and development

---

31 #BudgetWatch, http://www.rappler.com/move-ph/issues/budget-watch

32 DBM: Aquino administration bound to open governance with social contract with the people, http://www.gov.ph/2011/01/20/dbmaquino-administration-bound-to-open-governance-via-social-contract-with-the-people/, (Accessed on August 8, 2013)

33 Stats of the Nation, http://www.interaksyon.com/statsofthenation

34 Stats of the Nation, Ibid.

agencies to literally picture the country as you've never seen it before," the micro site explains.[35]

Rappler has also announced partnerships with technology companies like Google to "harness technology" to increase civic engagement.[36] The summit will touch on data journalism practices done by the news organisation.

WANTED: DATABASE-LITERATE, TECH-SAVVY JOURNALISTS

Since the publication of *The Electronic Trail* handbook for computer-assisted reporting, there has been no new literature to document skills required in doing data journalism in the Philippines.

At least two local universities teach computer-assisted reporting. They are the University of the Philippines and the Konrad Adenauer Asian Centre for Journalism (ACFJ) at the Ateneo de Manila University.

All the local journalists interviewed for this chapter agreed that there are basic skills required to do data journalism, but they can be broken down into three areas:

1. Sourcing of data: This requires traditional skills in "shoe-leather" journalism and research. In short, it is knowing where to look for data.

2. Processing and generating data: Knowledge of basic spreadsheet, database management, and GIS for mapping are necessary to be able to turn paper-based data into digital information that can be later analysed and visualised.

3. Presentation and rendering of data: Creation of charts, tables, maps, and other visual-oriented presentation of data is a skill that is no longer in the province of web designers and programmers. Journalists should be able to handle basic visualisation tools.

---

35 Ibid.

36 Rappler, Google partner for 2 summits, http://www.rappler.com/move-ph/35558-rappler-google-partner-for-2-summits?utm_source=inhouse&utm_medium=display&utm_campaign=thinkph_20130807

Alampay believes that data journalism is a logical progression of enterprising journalism. "We were doing this but we didn't have a name for it," he adds.

Ressa, on the other hand, says that data journalism is a logical path on news development since it allows news organisations to do news better. She says that another motivation for doing data journalism is capturing a younger audience on the Internet. "How do we make our younger readers care?", she asks.

Vera Files' Chua adds: "As journalists, our job is to tell a story. But in data journalism we do this by interpreting and making sense of data. Data should enhance our stories," she says.

SRI LANKAN EXPERIENCE OF DATA JOURNALISM DURING BALANCE OF PAYMENTS CRISIS IN 2008

BY SHIHAR ANEEZ

ABSTRACT

Sri Lanka faced its worst balance of payments (BOP) crisis in 2008. However, media failed to sense an inevitable crisis due to lack of skills on data reporting, unavailability of timely data, as well as confusing statements and numbers by the country's central bank. This research paper covers how the central bank tried to keep the crisis under cover through several measures including press releases, how the events were reported in general in Sri Lanka's local media and the possible reasons on media's failure to grasp an impending crisis. The study will be a good learning curve for journalists who report on complex data in preparing to cover a looming BOP crisis in a situation where they hardly find any data evidence.

INTRODUCTION

Not very many Sri Lankan journalists are data-savvy in their reporting. Financial journalism in Sri Lanka is still at an infant stage despite the fact that there are more than 15 daily newspapers in Tamil[1], Sinhala and English languages. Data journalism in electronic media is yet to develop compared to the local print media.

Financial journalists still struggle with data despite there is an availability of online resources to learn and report on important data. There is a strong demand from local and foreign investors and the general public for timely and accurate data and their interpretation. But journalists still tend to go with the comments and data from the government authorities without

---

1   English: The Daily News, The Daily Mirror, The Financial Times and The Island; Tamil: Sudar Oli, Thinakaran, Uthayan, Virakeseri, and Thinakkural; Sinhala: Dinamina, Divayina, Lakbima, Lankadeepa, Mawbima, and Ada

analysing what the implication the data could have on the public and, more importantly, the business community and investors[2]. Lack of analysts for better interpretation of data adds to the woes of local data journalism. Sri Lankan financial journalists, however, still continue to report a range of topics from economic growth to inflation, fiscal policies to monetary policies, development finance to government's public finance, and daily stock market data to rupee currency movements.

Many newspapers still publish all data and press announcement released by the government authorities including the Central Bank, Department of Census and Statistics, and Colombo Stock Exchange without any changes to the text and, more importantly, without relevance to the audience concerned. Except a few journalists, most of the reporters who handle data are simply unable to answer two critical questions: "so what?" and "what does the data mean for the relevant audience?"

The reports from these financial journalists have always been on the historic data and Sri Lankan data journalism has failed to give a forward outlook[3] of relevant data for the stakeholders to decide on the data or its trend. Unfortunately this situation continues even now.

Analysis of data will help to shape stories or provide journalists with a new angle in relevant stories. According to the Data Journalism Handbook,[4] using data shifts a journalist's job from being the first to report to the one telling the audience what the certain development in the data actually might mean with a future outlook such as the next financial crisis in the making and the economics behind the products we use, the misuse of funds or political blunders etc.

Decoding the data and reading financial statement in between the lines has been one of the main difficulties faced by journalists who depend on

2   There is no real motivation for journalists in Sri Lanka to write well-analysed data-based stories and doing what is perceived as getting into more trouble, mostly from government authorities.

3   In modern data journalism, future outlook of data is more important than historical data. But this needs to be done through research and analyses, from experts/economists.

4   Lorenz, M., & Welle, D. (2011), Why journalists should use data? In Gray, T., Bounegru, L., & Chambers, L. (Eds.). The Data Journalism Handbook. London: O'Really Media

data for their reporting. They are quite used to publish all the content of official release from monetary policy rates to inflation.

Chandra Jayaratne, a lobbyist for good governance and transparency and a former chairman of the Ceylon Chamber of Commerce (CCC), once said Sri Lanka's capital market investment analysts and financial journalists lacked adequate skills to do an effective job in reporting on corporate performance[5]. Almost all the newspapers in the three main languages have separate financial or business pages, but they depend on data published by the authorities, research reports, corporate results released by listed firms, and day to day press conferences.

There is no single independent body[6] in charge of compiling unbiased data. There is also no private sector research firm to compile economic and financial data independently unlike in some emerging economies. Most of the economic data are compiled and released by the central bank and the Department of Census and Statistics. Both institutions are perceived to have lost their independence as they both come under the Finance Ministry, a portfolio directly comes under President Mahinda Rajapaksa. Opposition politicians and economists have raised doubts over the accuracy of the data and statements released by both institutions.

The International Monetary Fund (IMF) in its latest Article IV consultation report[7] released in May this year said Sri Lanka has statistical issues in compiling data on economic growth, inflation, public finance, monetary policies and balance of payments. The global lender said the national accounts, which are used to compile economic growth, suffer from insufficient sources and undeveloped statistical techniques. It also said that there was no national index to compile inflation, and the official index

---

5   Sirimanna, A. (2007). Sri Lanka financial media can be bought cheap by private sector: senior executive. The Lanka Business Online. Retrieved from http://www.lankabsinessonline.com/news/sri-lankan-financial-medoa-can-be-bought-cheap-by-corrupt-private-sector:-senior-executive/1933526853

6   The Department of Census and Statistics is under the Ministry of Finance, while the head of the central bank is a political appointee, appointed by President Mahinda Rajapaksa who is also the Finance Minister of the country.

7   International Monetary Fund (2013), Staff Report for 2013 Article IV Consultation and Proposal for Post-Program Monitoring Informational Annex (pp 10-11), Washington DC: IMF.

is calculated only in the area around the capital of Colombo. A number of improvements were requested by the global lender to upgrade Sri Lanka's fiscal and government finance statistics, while it also urged more standardisation in compiling monetary statistics and balance of payments. This demonstrates that Sri Lanka has room to improve data compilation.

Since the end of a nearly three-decade war in May 2009, Sri Lankan President Rajapaksa has given the highest priority to the economy, led multi-billion dollar financed infrastructure projects with expensive commercial borrowings[8]. Foreign direct investments (FDI) or any other foreign inflows, through borrowings have been crucial for Sri Lanka's post-war economic revival. So maintaining a positive sentiment in the country's macroeconomic data had been imperative for Sri Lankan government. As a result, Sri Lanka has done its best to depict itself as a country with higher economic growth and improved macroeconomic numbers[9], and the government authorities mostly have attempted to give a rosy picture of the data, even if the numbers do not really mean a prosperous economy. The government authorities grossly failed to warn on implications of a negative trend in a data, until the crisis hit its worst level.

Technological advances have helped Sri Lanka's financial journalists to get more information about economic and financial data they cover. But, monopoly in data compilation withheld and delayed data[10] by the local authorities, as well as lack of skill to analyse the data by journalists and analysts, have made Sri Lanka's financial journalists to reprint the same press releases disseminated by government authorities. Writing a comprehensive and in-depth financial story using the available data with analysed scenarios is still a herculean task for most of the journalists reporting data, unless they have some advanced economic knowledge.

---

8   Most of the commercial borrowings are from China. The government has up to $21 billion worth of infrastructure projects through to 2015 and Sri Lanka has borrowed more than $7 billion from China between 2007 and 2013.
http://www.priu.gov.lk/news_update/Current_Affairs/ca201111/20111116sri%20_lanka_plans_21_b_public_investment_through.htm

9   Sri Lanka's average annual economic growth has been 6.6 percent in the past eight years since President Rajapaksa got elected as President, compared to below 5 percent average growth from 1951-2004; Inflation brought down to single digit and interest rates almost halved, according to central bank data.

10 Analysts say some data have been deliberately delayed until the crisis situation is reversed.

This paper will analyse how journalists were kept in dark in Sri Lanka's worst balance of payments crisis in 2008, despite the fact that government authorities were aware of the real situation. The central bank delayed and hid some data and showed a rosy picture through some inconsistent data time to time, so that both journalists and economists were unable to read the real situation the country was going to face. The central bank sometimes introduced new benchmarks, confused journalists with inconsistent data, or found faults with media reports which reported on a looming currency crisis and sometimes it slammed rating agencies for revising down ratings and outlooks. However, the central bank eventually had to face the reality. It had to float the currency to avoid another BOP crisis in 2009 and went for a bailout package from the International Monetary Fund. The implication on the public was immense with rise in the cost of living and inflation due to depreciation of the currency resulting in higher import expenditure.

BALANCE OF PAYMENT (BOP)

Balance of payments may be used as an indicator of economic and political stability[11]. For example, if a country has a consistently positive BOP or BOP surplus, this could mean that there is a significant foreign investment within that country. It may also mean that the country does not export much of its currency.

Any simple Google search would explain defending a local currency against a foreign currency (mainly US dollar) and heavy fiscal deficit could result in a BOP crisis. The collapse of a fixed exchange rate is typically marked by a sudden balance-of-payments crisis in which "speculators" fleeing from the domestic currency acquire a large portion of the central bank's foreign exchange holdings[12]. The end result is sharp devaluation of the local currency.

Balance of Payment is compiled with the help of three sub-accounts: current account, capital account and financial account.

---

11   Retrieved from http://www.investorpedia.com/terms/b/bop.asp

12   Obstfeld, M. (1984). Balance-of-Payments Crisis and Devaluation. Journal of Money, Credit, and Banking, Vol. 16, No. 2, pp. 208-217

The current account is composed of merchandise trade, services, income receipts, and one-way transfers such as foreign aid. The capital account includes transfers of financial assets such as tax payments and transfers of titles to assets. The financial account records trade in stocks, bonds, commodities and real estate. The fluctuations in these sub-accounts can indicate which sector of the economy is causing the discrepancy.

METHODOLOGY

All the central bank data and press releases with regard to BOP, gross official reserves, trade data and exchange rate from April 2008 to July 2009 were carefully revisited[13]. Then local print media reports from all three language papers on the central bank data and relevant press releases were also analysed to have a basic idea on how they reported a looming BOP crisis during the stipulated time period. Then the study used the real data released by the central bank to assess the extent of the crisis. The study also consists of some lessons learnt from the BOP crisis reporting for the benefits of journalists who may come across similar situations in the future.

The central bank usually holds data and there had been a two-month time-lag in data release. So for the convenience of this study, the findings have been divided into two parts. The first part will reveal the data, statements by the central bank and how they were reported in local papers. The second part will explain the real situation during the crisis using the official historic data made available on the central bank's website.

SRI LANKA'S 2008 BOP CRISIS: MEDIA COVERAGE OF DATA DURING THE CRISIS

Despite the major currencies faced sharp depreciation in the face of the global financial crisis, the central bank held Sri Lanka's rupee currency steady at around 108 per dollar in the first ten months of 2008 by absorbing and selling dollars depending on the flow[14]. When there were

---

13 All the press releases and data are available with the central bank's official website: www.cbsl.gov.lk

14 Sri Lanka, though has floated the currency in early 2000, the central bank usually defended it against depreciation historically.

foreign inflows into government securities, the central bank bought dollars without allowing the rupee to appreciate, while it sold U.S. dollars when there were foreign outflows from the government securities.

With the global financial crisis, foreign investors started to exit emerging and frontier markets including Sri Lanka. They sold Sri Lanka's treasury bonds and bills and moved their funds mainly to their own countries which were at the centre of the global financial crisis and desperate for liquidity[15]. The central bank, however, defended the currency at 108 per dollar by selling dollars in the market to prevent sharp depreciation, which has a political repercussion[16]. The currency defence depleted the country's foreign exchange reserves, though nobody knew the extent of the depletion up until the central bank released belated official data.

Currency dealers in the foreign exchange market told financial journalists who cover the markets that the central bank has been selling dollars heavily to defend the currency and the country could face a balance of payments crisis if the dollar sales sustained through 2008[17]. Some local media carried the dealers' claims. However, there was no data evident to prove that the country's reserves were on a declining path and that there was a looming BOP crisis. The central bank has the sole authority in compiling all data related to the balance of payments including trade, capital and services accounts, gross official reserves, dollar sales and purchase. So journalists covering data only had the comments from the market along with official outdated data. However they did not have the accurate and timely data to back up the currency dealers' claim. Officials from the central bank avoided responding to media calls for reactionary comments on currency dealers' claim.

The central bank did not reveal timely reserves data to the media and failed to explain the extent of the depletion. Through effective internal communication, the central bank also barred the critical numbers being

---

15 Sri Lanka's treasury bonds and bills have a strong demand due to their higher returns of well above 10 percent annually.

16 Sharp depreciation in Sri Lanka is perceived as a phenomenon associated with a weaker government

17 The central bank does not release daily dollar buying/selling figures.

leaked to the media[18]. It was one the most difficult times for number crunching financial journalists. The central bank also made sure there was no adequate data to assess gross official reserves and an impending balance-of-payment crisis situation.

However, some of the central bank's steps such as attempts to boost foreign currency reserves and too much emphasising on a BOP surplus in their monthly trade data raised doubts. In June 2008, the monetary authority came up with a new benchmark to show the strength of the reserves, saying "the gross official reserves increased to $3,433 million by end June, 2008, up from U.S. dollars 3,062.5 million in December 2007." This was the first time the central bank tried to compare monthly reserve position with the end of previous year's reserves. Before this, the central bank gave only the gross official reserves figure in dollars and number of months in import cover.

In October, when the global financial markets were grappling with the global financial crisis, the central bank invited proposals for a $300 million syndicated loan[19]. Local media, as usual carried each press release without any changes to the text in an isolated manner without explaining the risk of a balance of payments crisis. Some financial-savvy media outlets[20], however, were bold enough to report that Sri Lanka was clearly heading for a BOP crisis quoting some reputed local economist, though the central bank continuously denied it.

On October 13, 2008, the central bank said in a press that it "absorbed a substantial volume of dollar liquidity amounting to $622 million in order to deal with any adverse shock that could arise from a sudden withdrawal of foreign currency from the system for any reason, including a worldwide liquidity short supply." This was the first statement by the central bank giving a clue that there could be a sudden withdrawal of money. When the numbers were later released, they showed the central bank had sold $225 million in the previous two months before selling $587.7 million in October.

---

18 A top central bank official revealed this to me through personal communication.

19 A loan borrowed a group of lenders and is structured, arranged, and administered by one or several commercial banks or investment banks known as arrangers.

20 Lanka Business Online

In the same statement, the central bank, without revealing the reserves positions by October 13, said "the current reduction in oil and commodity prices is expected to ease the pressure on future outflows substantially over the next couple of months and the normal increase in remittances which takes place during the months of November and December is further expected to reverse the overall dip in foreign currency reserves that has taken place so far in the month of October." This was evidence that the central bank was privy of dwindling reserves and that a BOP crisis was looming. Local media, however, reported that the reserves were to be on the rising path within the next two months[21].

The trade data released by the central bank on October 23, 2008 showed the gross official reserves were at $3,424 million by the end of August, up from $3,062.5 million in December 2007 and were sufficient to finance around 3.0 months of imports. This statement was just after the central bank admitted there was an "overall dip in foreign currency reserves" in the month of October. Local media reported this statement without referring to the earlier statement which referred to the decline in foreign reserves.

Exactly a week later, on October 30, 2008, the central bank announced in a statement that it had decided to change its stance of defending the rupee exchange rate and will "allow the rupee exchange rate against the U.S. dollar to respond with greater flexibility, when compared to the very stable level that was maintained during the recent past." It also said the move would help "to contain inflation in the medium term, since there would be a lesser likelihood of higher fiscal deficits in the medium to long term, as this measure may reduce the need to provide fiscal subsidies to the export sector."

Soon after the central bank statement, the rupee depreciated nearly 2 percent to touch 110 per dollar on October 30 and the central bank was again compelled to defend the currency at the new level to prevent speculative trading. But in December, it was compelled to limit its intervention due to sharp depletion in the reserves. That resulted in a

---

21 The local media have been used to report only positive news after journalists were asked by the authorities to report only the positive aspects of events amid the final phase of a 26-year internal civil war.

further 4 percent depreciation in the currency and the rupee fell to 114 per dollar. The central bank again intervened to prevent speculation.

In October, the central bank stopped publishing its BOP position, which the bank had said was a surplus through to September. In the same press release, the central bank came up with two reserve figures: one was gross official reserves including liabilities to the Asian Clearing Union (ACU)[22] and another is that of excluding ACU liabilities. The central bank had given only the gross official reserves until this press release. Many journalists were not aware that the gross official reserves were represented by the figure excluding liabilities to the Asian Clearing Union. The two data confused them further and lack of clarification by the central bank compelled them to go with the same press release without any changes.

It read "Gross official reserves including liabilities to the Asian Clearing Union (ACU) declined to $3,048 million by end of October 2008, while the official reserves excluding ACU liabilities stood at $2,374 million." Here the central bank, deviating from its usual practice, did not provide the number of months of imports the reserves could cover. The statement also said the "repayment of large petroleum bills and outflow of foreign investment in T-bills and T-bonds contributed to the sharp decline in reserves during October 2008. Since financial market conditions are now gradually easing and a significant amount of short term funds have already flown out, the foreign exchange market is expected to stabilise in the next few months."

In November, Reuters quoted an unnamed source reporting that the only option Sri Lanka had was to go for an IMF bailout package to prevent a looming balance of payments crisis[23]. The central bank, responding to this report, conceded that the country would see a BOP deficit in 2008, and said Sri Lanka will only agree to an IMF loan if the lender accepts the country's economic plan as it is, despite dwindling foreign exchange reserves and a looming balance of payments deficit.[24]

---

22 Usually the central bank has some reserves with the Asian Clearing Union, but this is not included in gross official foreign exchange reserves

23 http://www.investing.com/news/financial-news/interview-update-1-s.-lanka-cbank-saya-imf-not-in-play-yet-5715

24 Usually IMF loans to Sri Lanka have been associated with tough reforms which are politically unpopular including cutting down high government expenditure and devaluation or sharp depreciation of the rupee currency.

Despite the central bank's rosy picture in press releases, the BOP crisis was more evident in December with Standard&Poor's Ratings Services (S&P), an international rating agency, downgrading Sri Lanka's sovereign rating by one notch down to B- from B+ mainly due to the deterioration in the reserves[25]. But, the central bank in a press release, said the S&P's assessment was "factually incorrect, logically untenable and grossly misleading."

In its response to the S&P statement, the monetary authority admitted that there was a decline in the reserves in October and November 2008 due to the supply of dollars to meet higher oil bill payments and to allow the outflows of T-bonds and bills. However, the central bank stated that the high risk of further loss of reserves was very unlikely.

"It is quite disappointing that S&P has apparently not realised that the decline in foreign exchange reserves is a global phenomenon under the present international financial crisis. Hence, it is grossly unfair to single out Sri Lanka only on a global situation and downgrade the rating position mainly based on that," the central bank's statement said

The central bank, meantime, tried to boost its reserves from January 2009 by promoting the Treasury bill and bonds among Sri Lankan diasporas and migrant workforce after failing to secure a $300 million from the proposed syndicated loan. That effort also failed. The bank also tried to go with swap deals with other central banks, but there was only a minimal success.

On Jan. 19, 2009, the central bank, responding to a local media report, said there is no truth whatsoever in a statement claiming that the central bank was considering currency devaluation with an IMF bailout package. In the same statement, the bank asserted that "gross official reserves including ACU balances stood at $2560.5 million at end of 2008 compared to $2195.8 million at end of 2004." Here, the central bank deliberately did not provide the reserves excluding ACU and it also compared with a new benchmark which the central bank had not used before. New benchmarks without much explanations and clarifications created more confusion

---

25 Sri Lanka was rated by both Standard and Poor's and Fitch in 2008. Later it went to Moody's after both rating agencies expressed negative views on the country's economic management.

among journalists who covered data and they found it extremely difficult to interpret. Hence, they reported the statement as it was.

In February 2009, Fitch Ratings, another global rating agency, also revised down Sri Lanka's rating outlook to negative from stable due to external financial position in light of the decline in reserves, which the central bank said "unwarranted".

In March 2009, the central bank however, admitted that Sri Lanka had sought a stand-by arrangement from the IMF, in the range of 300 percent of Sri Lanka's current quota with the Fund, which amounts to approximately $1,900 million.

With the reserves dwindling further, Standards & Poor's Ratings Services revised down Sri Lanka's rating outlook to negative from stable in May citing depletion in the reserves. But the central bank said the authorities considered the contents of the S&P report as outrageous, arbitrary and biased.

With the end of the war in May 2009, Sri Lanka started to see inflows to its government securities. It helped to boost the country's reserves, though they were not adequate to escape from a BOP crisis.

Later in July 2009, the central bank said the Executive Board of the IMF had approved a 20-month Stand-By Arrangement (SBA) facility amounting to approximately $2.6 billion to Sri Lanka as a Balance of Payments support. With this help the country escaped another BOP crisis in 2009.

The attempts made by the central bank transpired only after the country faced the crisis. Assuming that it could boost the reserves, the central bank delayed the reserves and foreign currency sales data to cover the inevitable balance of payment crisis. It gave statements after statements to boost investor sentiment, giving hope that the depletion of reserves was temporary. It stubbornly defended the currency, but the end results were more painful than a flexible exchange rate policy. The rupee depreciated around 10 percent, the country had to go for an IMF bailout package despite the central bank's initial denial that reserves plummeted to dangerous levels, and, eventually, Sri Lanka had to suffer a record balance of payments deficit in 2008.

SRI LANKA'S 2008 BOP CRISIS: THE DATA ON THE BOP CRISIS

Though the central bank had provided inconsistent and delayed data, it was later revealed that the gravity of the BOP crisis was far deeper than what everybody anticipated. The central bank's 2008 annual report released by end-March, 2009 showed the country suffered a record high BOP deficit of $1,384.8 million in 2008. The delayed gross official reserves and central bank's dollar trading data showed a grim picture of the economy.

Gross Official Reserves

■ Gross Official Reserves   *Source: Central Bank of Sri Lanka*
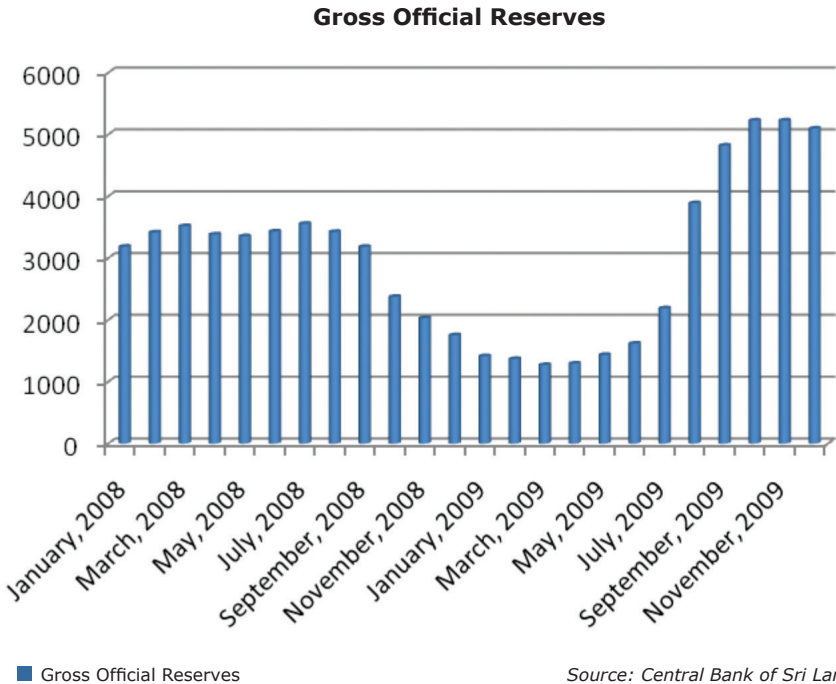
There had been a gradual reduction in reserves from July 2008 and it reached their minimum level in March 2009, as the central bank's delayed data showed. By September 2008, it was evident that Sri Lanka was heading for a BOP crisis, though the central bank did not reveal the data.

The rupee fell more than 10 percent between October 30, 2008 and April 23, 2009, as the central bank actively failed to defend it, after the reserves dwindled to a level enough to cover only around one month of imports. It was also later transpired that the central bank had sold a net $1,767.85 million from its reserves to stubbornly defend the currency during the crisis period from April 2008 to March 2009.

Net purchase
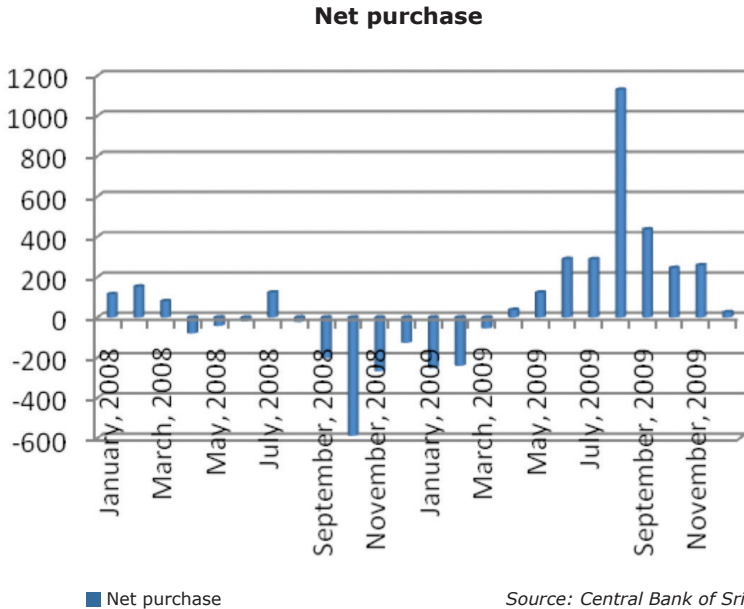
Source: Central Bank of Sri Lanka

As the central bank defended the rupee, it became cheaper as it was undervalued. This encouraged more imports and discouraged exports. As a result, the country suffered a record trade deficit of $5.87 billion in 2008.

Had the country not gone for the IMF bailout package, both currency and BOP crisis would have caused immeasurable damage to the island nation's economy in 2009.

LESSONS LEARNT FROM THE BOP CRISIS REPORTING:

1. ***Data should always be questioned.*** Sri Lankan financial reporters had confidence in the accuracy of the central bank's delayed data, but none of them had challenged the data by comparing it to experiences of other countries which had faced similar BOP and currency crisis. They failed to question the central bank on the discrepancies and new benchmarks in their statements.

2. ***Data journalists should always be wary of authorities' numbers, especially when they delay the official release.*** In this experience, the central bank did not release timely data on reserves and dollar sales to the market. By delaying the data, the central bank bought some time, covered BOP risk from the public, assuming that the reserves could be built up with usual strategies, which utterly failed.

3. ***New and inconsistent benchmarks, unfamiliar technical words, and confusing phrases in press releases*** could usually mean that authorities want to keep media in the dark. The central bank, during the 2008 BOP crisis, changed benchmarks. It sometimes compared the gross official reserves to numbers from previous years. Other times it compared total reserves with 2004 figures. In some cases it came up with two figures, including and excluding Asian Currency Union reserves.

4. ***Knowledge and skills on data compilation:*** Data journalists must know how a particular number is calculated. If data reporters had known how the central bank calculates reserves during the BOP crisis scenario, they could have dug deeper and done in-depth reporting. This is very important in data journalism. Basic knowledge on data will help journalists build up stories on data by looking into its reserves. Data journalists could have looked into each component in compiling reserves and conducted research on what had been happening to each of them during the crisis. In this BOP crisis, data journalists could have looked into trade, current, capital and financial accounts separately to see whether they depleted reserves.

5. ***Analysing overall data and statements:*** If Sri Lankan media had reported the central bank's data by comparing previous numbers and statements during the crisis period, they could have gotten an idea of the extent of the problem the country was facing. However, they chose to stick to the central bank data without questioning it.

REFERENCES

- Central Bank of Sri Lanka, annual, monthly, weekly reports from www.cbsl.gov.lk

- Daily business reports from Daily News, Daily Mirror, The Island, Divayina, Lankadeepa, Dinamina, Lakbima, Thinakaran, Veerakesari, Thinakkural, Sudar Oli

- Lorenz, M., & Welle, D. (2011), Why jornalists should use data?. In Gray, J., Bounegru, L., & Chambers, L. (Eds.) , The Data Journalism Handbook. London: O'Really Media

- Sirimanna, A. (2007). Sri Lankan financial media can be bought cheap by corrupt private sector: senior executive. The Lanka Business Online. Retrieved from http://www.lankabusinessonline.com/news/sri-lankan-financial-media-can-be-bought-cheap-by-corrupt-private-sector:-senior-executive/1933526853

- International Monetary Fund (2013), Staff Report for the 2013 Article IV Consultation and Proposal for Pos-Program Monitoring Informational Annex (pp 10-11), Washington DC: IMF

- Retrieved from http://www.investopedia.com/terms/b/bop.asp

- Obstfeld, M. (1984). Balance-of-Payments Crises and Devaluation. Journal of Money, Credit and Banking, Vol. 16, No. 2, pp. 208-217

- http://www.investing.com/news/financial-news/interview-update-1-s.-lanka-cbank-says-imf-not-in-play-yet-5715

A SEAT RESERVED FOR DATA JOURNALISM IN ONLINE-SAVVY INDONESIA

BY EDI UTAMA

Gone are the days in journalism when news stories were presented only through a string of words, twisted or not. Many journalists nowadays - as many classical notions on journalism are being made irrelevant by the dizzying onslaught of the ever forward-never-ending digital information technology - have to face an uphill battle to present their stories in a way that they appear appealing enough for readers to 'consume'. Adorning their stories only with the most creative concoction of sentences is not the answer to the great challenge. Journalists also need to be equipped with easily digestible data - figures, statistics and graphics.

Politics-wise, journalists in Indonesia can call a spade a spade. The freedom of the press is fully guaranteed by the law after being subjected to tight control for over three decades. Journalists had once opted to write their reports qualitatively and shunned a quantitative presentation of their reporting in that era. Qualitative reports had been flexible and, therefore, provided more messages between the lines. The quantitative reports, on the other hand, would always need a clear depiction of what was being talked about.

Digging up data, especially those related to economic matters, by theory is made easier by the recent exposure of Indonesia to its international or regional obligations. For instance, being a member of the Asia Pacific Economic Cooperation (APEC), Indonesia has agreed to implement the Transparency Standards on Government Procurement adopted in 2004. Hence, journalists have quite a good leeway to ask government officials on procurements. The government has also endorsed the United Nations Convention against Corruption as part of its strategies for combating or preventing corruption, as well as for strengthening integrity in numerous government activities.

In 2008, the parliament passed the freedom to information act and promulgated it into law in the same year. Thus there is, at least officially,

no way for government officials in Indonesia to misguide journalists from obtaining the data they require. In the past, Indonesia ranked poorly on all major corruption indices, thus transparency and integrity in public procurement, for instance, has always been an issue. The presence of the law has done enough for journalists to get data. Two years after the implementation of the law, the media found Indonesian bureaucracies to be more media-friendly. More and more government and state institutions, including the police, have stated their readiness to provide the public with any data they require.

What is even more fascinating is that government ministries, bodies and institutions, provide data in processed formats, such as tables and many other convenient ways of presenting data in graphics. In most cases, the data items are easy to use and understand, and are kept up to date. One most important source of data is the Statistics Indonesia (BPS) which is accessible at http://www.bps.go.id/eng/. BPS has all the data, ranging from statistics on child mortality to latest figures on livestock imports to hotel room occupancy rates in Indonesian cities. As a rule, BPS data can be used free of charge for journalistic reporting purposes. Corporations and companies in Indonesia are also journalist-friendly, as far as data is concerned. They regularly publish data on their business or industrial performance on their websites and are quotable by journalists as long as the companies' names are credited as the source.

DATA IN JOURNALISM

It is conceivable that data had been put into the reports of *Acta Diurna*, the supposedly first form of news sheet issued on a daily basis by the government in the Roman Forum from the year 59 B.C. to at least A.D. 222. *Acta Diurna* which was filled with news such as political happenings, trials, scandals, military campaigns and executions[1]. Therefore, even in *Acta Diurna*, data must have been used as part of news reporting.

News reports on the eruption of the Krakatoa volcano reached Europe within hours after the great natural calamity took place in late August 1883. The reports were sent by W. Brewer, *Reuters* news agency's stringer

---

1   http://handwrittennews.com/2011/06/20/acta-diurna-it-59-b-c/

in Batavia, the old name of Jakarta during the 19th century Dutch colonial government[2]. The reports certainly must have been filled with quantitative and qualitative data so as to provide reasons for the bewildering world on why there had been sudden permanent darkness for several weeks in many corners of the globe.

Data would not only add information to the stories, but would make them more credible as well. While reminding journalists to use figures and statistics judiciously, Dinesh Sharma emphasises in her piece on development journalism that figures and data help in illustrating a trend of presenting a larger picture. They also add credibility to a story provided the source of the data is credible[3]. He also argues that statistics tend to reduce a complex, real situation to a simple, more graphic number.

While the terminology of computer-aided reporting (CAR) has previously been known among journalists in Indonesia, data journalism seems to be a different case. According to Bambang Purwanto, writing news stories will always mean putting relevant or necessary data into them[4]. However, he regards the terminology of data journalism as something novel, even though the emergence of this new trend is comprehensible considering the rapid development of digital technologies within the last decade.

Computer-aided reporting (CAR) was in fact the first organised, systematic approach towards using computers to collect and analyse data to improve news reporting. This method for presenting news stories with processed data was first used in 1952 by CBS to predict the result of the presidential election. Since the 1960s, journalists have sought to independently monitor power by analysing databases of public records with scientific methods. Also known as 'public service journalism', advocates of these computer-assisted techniques have sought to reveal trends, debunk popular knowledge and reveal injustices perpetrated by public authorities and private corporations[5].

---

2   Simon Winchester, 2003. *Krakatoa, the day the world exploded, August 27, 1883.* New York: HarperCollinsPublisher. pp 192-194.

3   Dinesh C. Sharma, 2007. *Development journalism: an introduction.* Quezon City: Ateneo de Manila University, page 88.

4   Bambang Purwanto, deputy executive editor of the Indonesian national news agency Antara.

5   http://datajournalismhandbook.org/1.0/en/introduction_4.html

Towards the end of the 1980's, *Prioritas* daily made history in the Indonesian press as it became the country's first full colour newspaper styled after the *USA TODAY* format, both by layout and design[6]. The short-lived newspaper, closed down by the Suharto government in July 1987 for its allegedly politically crusade style of reporting, had routinely used statistics and tables as part of its reporting on the pages. Such a reporting style was not only rare at the time, but was also generally considered unusual[7].

Indonesia's largest daily *Kompas* – a broadsheet format – is apparently at the front for routinely using processed data in form of tables, statistics and latest styles of data presentation. Being the most widely circulated daily newspaper in Indonesia, it has been around since it was first published by the Kompas-Gramedia Group on 28 June 1965. The paper is published in Indonesian language and maintains a reputation for high quality writing and investigative journalism. In 2004, *Kompas'* daily circulation reached some 530,000 copies, and its Sunday edition, 610,000 copies. Readership totalled some 2.25 million. Since 2010 it has also gone into a digital version for readers using tablets, developed by Serious Technology, the leading technological provider for the publishing industry in Southeast Asia and WoodWing Software, a leading supplier of innovative cross-media publishing solutions[8].

DATA JOURNALISM AND ICT

Since the emergence of the web in the early 1990's and the subsequent rapid development of digital information and communication technology in the early 2000's, journalism has ascended to new heights. Journalism was used to be known only in the circles of audio (radio) and audio-visual (television) that were incorporated into the so-called broadcast journalism. The development of Internet technology in the decade has brought about online journalism. This phenomenon involving the interconnection

---

6   http://pwi.or.id/index.php/presspediapwi/800-n-dari-ensiklopedi-pers-indonesia-epi

7   Dhia Prakesa Yudha, former journalist of Prioritas.

8   http://tekno.kompas.com/read/2010/06/02/2043251/Kompas.ePaper.Pertama.da-lam.Format.iPad

of information and communication technologies, computer networks, and media content brings together the computing, communication, and content as a direct consequence of the digitization of media content and the popularization of the Internet[9].

Whereas data journalism may be briefly described as journalistic chores done by using certain processed data as the basis for story telling, in its presentation, visualizations can be used to create a clear understanding of a complex situation. This definition may enable the inclusion of data journalism into the basic ideas of journalism, namely print and broadcast. In this digital and fast-progressing ICT era, however, Belam argues that the concept of 'journalism' is a separate thing from the concept of running a newspaper. Whilst the recession and structural changes in the industry have put the business model of making and selling newspapers under severe strain, journalism in a digital age will undoubtedly continue[10].

Multimedia journalist Fredrick Mugira argues that ICT has led to the generation of more well-researched news. When it comes to the Internet, news and programme backgrounders are always available[11]. The Internet has surely transformed the newsroom to greater heights and, more importantly, this comes as a result of globalisation and, in a way, is also a cause of globalisation.

Vineet Kaul, a communication and technology expert, argues that the digital narrative allows for a better understanding of world events (global warming, migration issues, the economic crisis) through graphics, enrichment of experts and victims' testimonies, conversations taking place over various locations and collaboration with other media. Data journalism permits for visual information to be transformed into knowledge, and knowledge constitutes an enormous developmental potential[12].

---

9   http://global.britannica.com/EBchecked/topic/1425043/media-convergence

10   http://www.guardian.co.uk/help/insideguardian/2010/apr/14/journal-ism-trends-tools-technologies

11   http://mugira.wordpress.com/2007/12/26/impact-of-ict-on- journalism/

12   Vineet Kaul, 2013. *Journalism in the Age of Digital Technology*. Online Journal of Communication and Media Technologies, Volume: 3–Issue: 1–January – 2013, India: DAIICT University, p. 132.

In its Group Strategy 2012-2015, the World Bank has acknowledged that the impact of ICT on the media has transformed development[13]. The rapid growth of ICTs has profoundly affected the media and its role in development. The media landscape has become more dense, complex, and participatory. More people than ever can engage in public discourse, undertake collective action, and demand improved services or greater accountability on socio-political and economic issues.

The World Bank puts emphasis on the fact that these new technologies and behaviours also have important economic implications that contribute to growth and job creation. Local, national, and international organisations, including government and nongovernment entities, have already engaged the media sector to address development challenges ranging from governance and anticorruption to combating the effects of climate change.

More than nine million Internet users in Indonesia are between 25 to 30 years old. This group, also known as Digital Natives, has spearheaded the trends in the cyber world. In addition to being the largest in number, this age group is found to be the most influential group. This group was discovered to be the most avid visitors of news portals and entertainment websites, according to a research done in 2011 by South East Asia Effective Measure, a data aggregator group with bases in Melbourne, Dubai, Cape Town, Jakarta and some other Southeast Asian cities. The smallest percentage of Internet users were between 51 to 54 years[14].

Based on the reality that digital natives are those prone to a fast-moving lifestyle and the most dynamic professionals, it is likely that they will be the largest segment within the Indonesian society to demand data journalism. This will be a group that focuses less on journalism using written expression, but instead prefers and values processed data or statistics. These digital natives are more likely to define themselves by their reluctance to devote their time on matters they consider to be time-consuming, including reading entire news stories in the "old fashioned" printed way.

---

13 World Bank Group Strategy, 2012. *ICT for Greater Development Impact for Infor-mation and Communication Technology* 2012-2015

14 http://teknologi.news.viva.co.id/news/read/227075-usia-dominan-pengguna-inter-net-di- indonesia

The Indonesian Internet Service Providers Association (APJII) has estimated that the number of internet users in Indonesia is to grow to 82 million at the end of 2013. In 2011, Internet users in Indonesia amounted to 55 million then grew to 63 million in 2012[15]. With the rise of Internet users over the years, APJII with a membership of 284 companies nationwide is preparing a strategic move. One part of this strategy is to improve the capacity of the Indonesia Internet Exchange (IIX). The IIX, where the connection of various ISP data traffic goes through, does not have to spin through the channels abroad. The IIX' goal is to form a national interconnection network that has the ability and facilities to suit all needs[16].
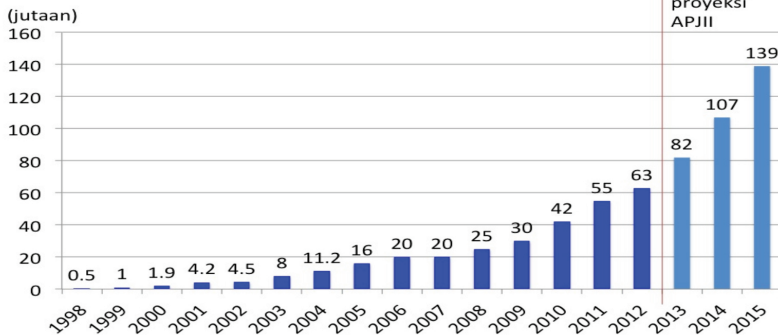
Source: APJII-Indonesia Internet Service Provider Association

---

15 APJII chairman Sammy A. Pangerapan in a press statement during APJII National Working Meeting in, 29 May 2013, in Jakarta.

16 http://www.apjii.or.id/v2/index.php/read/article/apjii-at-media/169/-akh-ir-2013-pengguna-internet-capai-80-juta.html

Depending on the availability of modern communication and IT access and service, the Indonesian government projects at least a 50 percent internet user penetration rate from the 240 million population by 2014. Broadband user penetration level is estimated to be at least 30 percent, digital television penetration level for the population at least 35 percent. The number of cities and regencies equipped with broadband service are expected to reach 75 percent of the total cities and regions[17].

Indonesia is the world's largest archipelagic nation, consisting of over 17,000 islands, spanning some 5,235km. Taking this geographical factor into account, providing Internet service has been a challenging task. However, by December 2012, the Indonesian government had been able to provide Internet infrastructures to 5,748 districts nationwide, the so-called District Internet Service Center (PLIK)[18]. Mobile phone services have already reached 33,824 villages in March 2013.

According to the number of mobile subscriptions, Indonesia is ranked fourth of the world's top 10 mobile markets in 2013[19]. At the end of 2012, there have been 260 million mobile subscribers with a population of 242 million. Subscribers of 3G and 4G amount to 47.6 millions, or 19 percent of the total population.

Smartphones, one of the best tools for accessing news and information, are also flooding the Indonesian gadget market. The U.S.-based International Data Corporation (IDC) estimated a smartphone shipment of 45 millions sets at the end of 2012. This figure is expected to go up 16 percent in 2013, and by 2014 it is predicted to grow as strong as 22 percent. It is interesting to note that the growth of smartphones has been driven by demand from outskirt/rural areas of Indonesia[20].
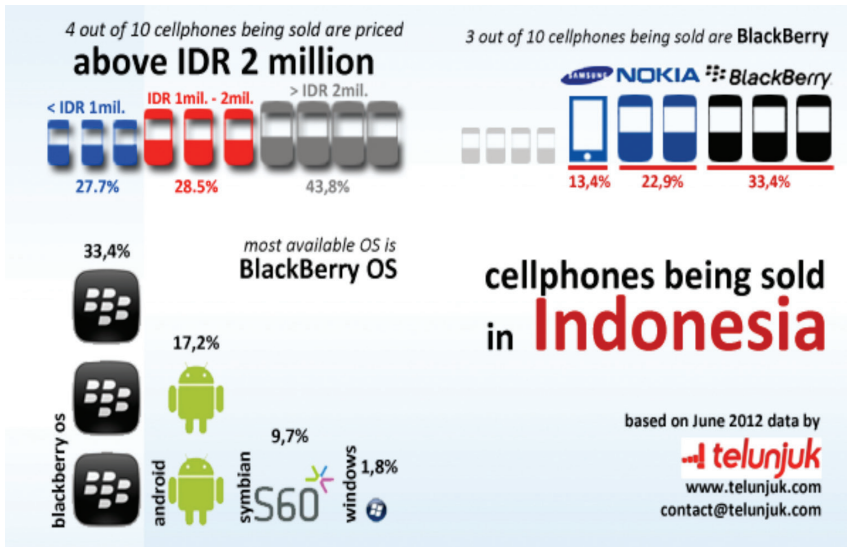
---

17 http://web.kominfo.go.id/sites/default/files/Prioritas%20Kominfo%20210-214.pdf

18 http://www.itu.int/ITU-D/asp/CMS/Events/2013/ASEAN-USOF/Indonesia_country_report.pdf

19 http://mobithinking.com/mobile-marketing-tools/latest-mobile-stats/a

20 http://www.idc.com/getdoc.jsp?containerId=prID23688812

Source: Telunjuk, an Indonesian smartshopping search engine

Based on those facts and realities, data journalism may thrive in Indonesia in the near future. As a digital communication and information apparatus it will most likely experience a steady rise particularly among the country's younger population. Data journalism may also play the right role as younger generations in Indonesia prefer to enlighten themselves on daily events of affairs by accessing them from the web using mobile devices. Data nicely put and wrapped into graphics might be a quick and easy way to consume information.

The time – which is happening now – when digitized information is part of life necessities was envisioned by Koelsch. As he argues, it will be inconceivable to be 'off net' – to be offline and inaccessible. Regardless of where they are, they will be constantly plugged into the global network. They will always have their communicator with them. The network will know where they are and how to reach them – anytime. We are almost there today.[21]

---

21 Frank Koelsch, 1995. *The Infomedia revolution*. Canada: McGraw-Hill Ryerson Limited. p. 295.

REFERENCES

1. All-Indonesia Journalists Association (PWI). Retrieved 3 June 2013 from http://pwi.or.id/index.php/presspediapwi/800-n-dari-ensiklopedi-pers-indonesia-epi

2. Association of Indonesian Internet Service Provider (APJII), 2013. Retrieved 19 May 2013 from http://www.apjii.or.id/v2/index.php/read/article/apjii-at-media/169/-akhir-2013-pengguna-internet-capai-80-juta.html

3. Belam, Martin, 2010. *Journalism in the digital age: trends, tools and technologies.* Retrieved 17 June 2013 from http://www.guardian.co.uk/help/insideguardian/2010/apr/14/journalism-trends-tools-technologies

4. Data journalism handbook, Open Knowledge Foundation. Retrieved 22 May 2013 from http://datajournalismhandbook.org/1.0/en/introduction_4.html

5. Encyclopaedia britannica. Retrieved 20 June 2013 from http://global.britannica.com/EBchecked/topic/1425043/media-convergence

6. Fredrick, Mugira, 2007. Impact of ICT in Journalism. http://mugira.wordpress.com/2007/12/26/impact-of-ict-on- journalism/

7. Handwritten Newspapers Project, the, 2011. Retrieved 22 June 2013 from http://handwrittennews.com/2011/06/20/acta-diurna-it-59-b-c/

8. International Data Corporation(IDC), 2013. Accessed 19 June 2013 http://www.idc.com/getdoc.jsp?containerId=prID23688812

9. Kaul, Vineet, 2013. *Journalism in the Age of Digital Technology*. Online Journal of Communication and Media Technologies, Volume: 3–Issue: 1–January – 2013. India: DAIICT University

10. Koelsch, Frank, 1995. *The Infomedia revolution*. Canada: McGraw-Hill Ryerson Limited.

11. Kompas daily, 2010. Retrieved 24 June 2013 from http://tekno.kompas.com/read/2010/06/02/2043251/Kompas.ePaper.Pertama.dalam.Format.iPad

12. Ministry of Communication and Information Technology (MCIT) of the Republic of Indonesia, 2012. Retrieved 30 May 2013 from http://web.kominfo.go.id/sites/default/files/Prioritas%20Kominfo%20 210-214.pdf

13. Ministry of Communication and Information Technology (MCIT) of the Republic of Indonesia, 2013. Retrieved 21 May 2013 from http:// www.itu.int/ITU-D/asp/CMS/Events/2013/ASEAN-USOF/Indonesia_ country_report.pdf

14. MobiThinking, 2013. Global mobile statistics 2013 Part A: Mobile subscribers; handset market share; mobile operators, 2013. Retrieved 20 June 2013 from http://mobithinking.com/mobile-marketing-tools/ latest-mobile-stats/a

15. Pangerapan, Sammy A., chairman, Association of Indonesian Internet Service Provider (APJII) in a press statement during APJII National Working Meeting in, 29 May 2013, in Jakarta.

16. Purwanto, Bambang, deputy executive editor of Indonesian national news agency Antara, interviewed 3 June 2013 in Jakarta.

17. Sharma, Dinesh C. 2007. Development journalism: an introduction. Quezon City: Ateneo de Manila University

18. Vivanews, 2011. Retrieved 19 June 2013 from http://teknologi.news. viva.co.id/news/read/227075-usia-dominan-pengguna-internet-di-indonesia

19. Winchester, Simon, 2003. Krakatoa, the day the world exploded, August 27, 1883. New York: HarperCollinsPublisher.

20. World Bank Group Strategy, 2012. ICT for Greater Development Impact for Information and Communication Technology 2012-2015.

21. Yudha, Dhia Prakesha, former journalist of Prioritas, interviewed 6 June 2013 in Jakarta.

ABOUT THE AUTHORS

BRUCE AVASADANOND

Dr. Bruce Avasadanond is a Thai national based in Bangkok, Thailand. He is a radio journalist and hosts the weekly Sunday Night News Talk program on Radio Thailand English Language Service.

Dr. Avasadanond is also an educator and currently teaches journalism at Thammasat University's Bachelor of Arts Program in Journalism Program (BJM) and social studies at Srinakharinwirot University's International College. He has also worked as a United Nations consultant in the area of English language training for UNESCAP, FAO, UNFPA, and UNESCO.

Dr. Avasadanond holds a Ph.D. in Development Administration from the National Institute of Development Administration (NIDA); a Master of Arts in Journalism from the Ateneo de Manila University where he was a Konrad-Adenauer Stiftung Fellow; a Master of Management from Mahidol University; and a Master of Education in Adult Learning and Global Change along with a Bachelor of Arts in Spanish from the University of British Columbia (UBC). He also possesses diplomas in Radio Journalism (Ateneo), Distance Education (Athabasca University), and TESOL (Vancouver Community College). He is currently participating in the Internet Society's Next Generation Leaders' Programme and has completed a number of courses on Internet Governance with the DiploFoundation.

Dr. Avasadanond's picture was taken by DJ Clark.

EDI UTAMA

Edi Utama is senior editor with Antara News Agency, Indonesia's national wire service. He embarked on journalism in 1987 as a reporter with PrioritaDaily and, after the untimely closure of this Indonesia's first full color daily on July 1988, he wrote stories and articles for Vistamagazine in Jakarta and The Jakarta Postbefore joining Antara in 1989. Edi then moved on his career span that opened a rich, international horizon for him when he was assigned to overseas postings as a foreign correspondent in Tokyo, Japan, then Bejing, China. Capitalising on his rich experience in journalism, Edi nowadays has also been involved in media consultancy activities for companies and other clients as well as assisting the Indonesian government in its official publications.

ERWIN OLIVA

Erwin Oliva has been a journalist since 1995. He has reported on health, medicine, science, technology, business, government, and politics. He is also an award-winning journalist, having won three consecutive science journalism awards from the Department of Science and Technology from 2002 to 2004, then later qualifying him for a Hall of Fame award from the same agency. His career spans working for pioneering teams of news website INQUIRER.net and Yahoo! Philippines, the latter of which he was country editor from 2009 to 2013. He currently teaches journalism at the University of the Philippines, where he handles newswriting, online journalism, and data journalism or computer-assisted reporting. He aspires to become an entrepreneur, as his interest also lies in high-tech. He is now working for a technology giant, heading its product development for content and services division in the Philippines. He is also a fellow (2006-2008) of the Konrad Adenauer Asian Center of Journalism. In his spare time, he plays for his indie rock band called SamMustSwim.

KY PUNG

KY Pung is the Editor of where2 travel and lifestyle magazine. He is also the Media Representative (Malaysia) of The Wall Street Journal Asia. He has worked with Malaysia's largest English newspaper, The Star, over a span of 25 years. The last position held was as Regional Associate Editor.

KY Pung is the President of the Society of Asian Journalists for the 2012-2013 term.

SIMON WINKELMANN

Simon Winkelmann is currently working as a Research Associate for the Konrad-Adenauer-Stiftung (KAS) in Singapore. He has been working for the United Nations, European Parliament and the German Mission to the European Union. After studying in the Netherlands and Mexico, he graduated with a Master's Degree from the University of Edinburgh. He joined the KAS Media Programme Asia in April 2011. He is the editor of this publication.

SHIHAR ANEEZ

Shihar Aneez is a correspondent for Reuters News Agency based in Colombo, mainly covering economic and financial topics. He started his career as a freelancer at a state-owned newspaper company in 1998 covering general, business, and sports news until 2004. He then specialised in business and economic news reporting by analysing data at a private TV channel before moving to Reuters in 2007. He has been covering stock markets in Southeast Asia since 2010 based in Colombo apart from covering Sri Lanka and Maldives. He also has covered the Cricket World Cups in 2011 for Reuters and the final phase of Sri Lanka's nearly three-decade war and unrest in Maldives after a sudden power transition in 2012 among many other hostile environment coverage. Currently he is heading Reuters bureau in Colombo and is also the president of the Foreign Correspondents Association in Sri Lanka. He has a honours degree in Bachelor of Science (Agriculture), majoring in Economics. He was a Konrad-Adenauer-Stiftung scholar from 2007 to 2009, where he was awarded a media fellowship to complete a Masters in Arts degree in Journalism at the Ateneo de Manila University in the Philippines. He has also completed a Masters of Arts in Economics degree at the University of Colombo in 2012. He played for the Sri Lankan national hockey team from 1995-1996.

SUSAN TAM

Susan Tam is a freelance journalist based in Kuala Lumpur, Malaysia. Her journalist experience include reporting on global affairs for Al Jazeera English TV, Singapore Press Holdings and The Star. Susan is passionate about social issues and communities and leads Hati.my, Malaysia's largest open charities portal along with several community gardens in Malaysia. Photo credit to DJ Clar

What is data journalism? Both 'data' and 'journalism' are troublesome terms. Some people think of 'data' as any collection of numbers, most likely gathered on a spreadsheet. 20 years ago, that was pretty much the only sort of data journalists dealt with.

But we live in a digital world now, a world in which almost anything is described with numbers. Today, news stories are coming in as they happen, mostly from multiple sources. This is why data journalism is so important. Gathering, filtering and visualising what is happening - telling a complex story through engaging infographics and figures.

With this publication, we would like to gain an Asian perspective on the topic. Since when is data journalism applied in Asia, how is it practised in the region? Who were the pioneers, who are the experts? What are the challenges of this new form of reporting and what are the future opportunities?

We invited six authors, all members of the Society of Asian Journalists (SAJ) and Alumni from the Konrad Adenauer Asian Center for Journalism (ACFJ) at Ateneo de Manila University in the Philippines, to give answers to those questions.