

An Evaluation of the Impact of a Collaborative Journalists Brazilian Journalists and Audiences

 By: Claire Wardle Angela Pimenta, Guilherme Conter, Nic Dias, Pedro Burgos



Powered by:





Introduction

Comprova was an ambitious, collaborative journalism project that focused on verifying or debunking questionable stories published on social media and within messaging apps during the 12 weeks leading up to the Brazilian 2018 presidential election. Facilitated and supported by First Draft, the project involved 24 of Brazil's largest newsrooms and included 59 journalists and editors, aided by an additional three First Draft staff members.

Designed to provide a trusted source of information for Brazilian voters, Comprova's ambition was to prevent the duplication of newsrooms verifying the same content, to consolidate the verification effort, and to ensure that quality information was amplified via the large audiences that already engaged with the 24 news brands.

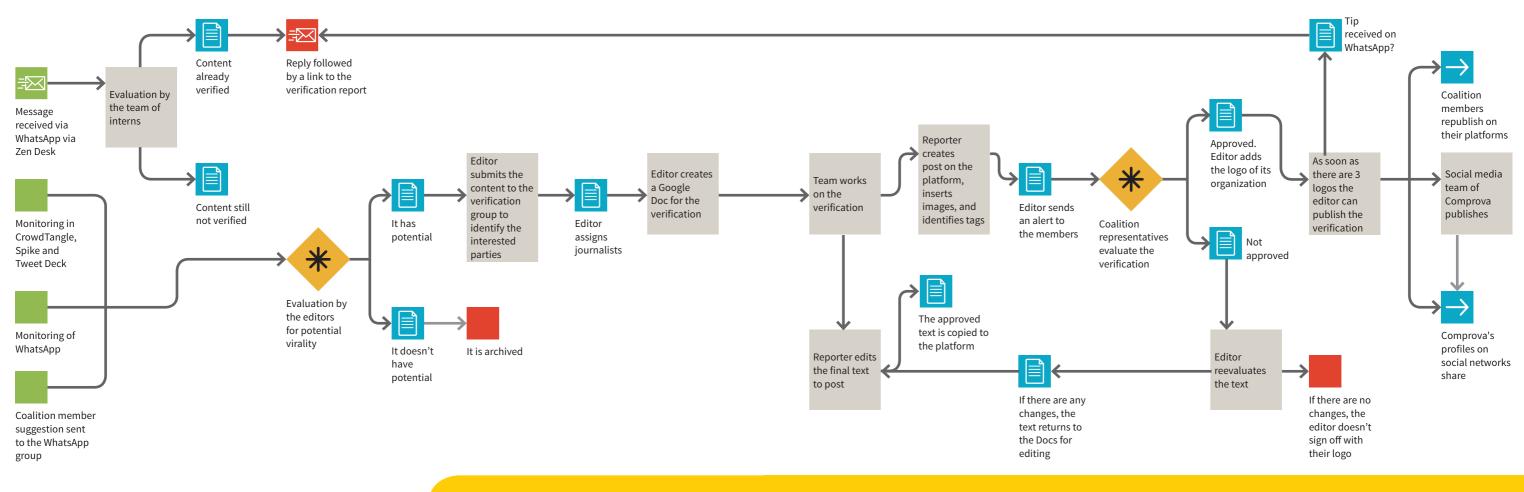
Comprova was inspired by the CrossCheck methodology, devised by First Draft's Managing Director, Jenni Sargent, and first tested in the lead up to the 2017 French presidential election. CrossCheck France brought together 37 organizations (33 of them local and national newsrooms) between the end of February until early May 2017, to collectively debunk misinformation relating to the election and to publicly share responsibility for the accuracy and transparency of the resulting reports.

To 'CrossCheck' a report means reviewing and approving the verification steps taken by another newsroom, adding the logo of your organization alongside other contributing partners, and then amplifying the report to existing audiences.

By Claire Wardle, Director, First Draft



COMPROVA WORKFLOW DIAGRAM



Confirming the findings from the evaluation of the CrossCheck France project, this evaluation of Comprova demonstrates that the CrossCheck model does work: it has significant impact on the journalists who participate - and by extension their newsrooms - and likewise has a clear, positive impact on readers and audiences.

COMPROVA BY NUMBERS



1,750 Number of original articles published by Comprova partners based on reporting by the Comprova project

146 Number of Comprova reports published on projetocomprova.com.br

Social Media

00

- 2,711,578 Total engagements on social media related to Comprova content
- 1,358,422 Total engagement with content on the Comprova Facebook Page
 - 754,562 Total engagement with all Comprova-related stories on the partners' Facebook and Twitter pages
 - **598,594** Total engagement on Facebook and Twitter when partner newsrooms posted Comprova reports on their social accounts
 - **135,000** Number of Comprova's Facebook Page followers
 - **18,000** Number of Twitter followers for @comprova

debunks

Mapped:

- 3,413 Number of Instagram followers on @projetocomprova
- 573 Number of Facebook and Twitter posts that mentioned Comprova
- 466 Number of Comprova YouTube channel subscribers
 - 6 Number of Twitter Moments designed to teach verification techniques to audiences

TRAINING

Content:

Monitoring

techniques

TweetDeck)

Established:

transparency, and

Monitoring workflow

responsibilities

Advisory board

Weekly coalition

coalition team

messaging tool

WhatsApp public

• Coalition partners,

editors, and

including verifiers,

managers who did

not attend previous

Comprova-related

line strategy

Attendance:

events

calls (Zoom)

Slack as the

guidelines

ethical responsibility

<u>(</u>	WhatsApp
50,567	Total number of interactions betw journalists on WhatsApp

	Journalists on whatshipp
78, 462	Number of files containing tips and supporting evide the public Comprova WhatsApp number
48,488	images
24,345	video files
4,831	audio files
67,870	Number of new tips sent in from the public (doesn't i responses)
108,443	Number of WhatsApp messages sent from the Compr individual members of the audience
18,154	Number of messages shared by Comprova journalists WhatsApp group

COMPROVA TIMELINE

Feb 2 2018

Nov 13 2017

FIRST MEETING	1st WORKSHOP
 First Draft presentation (CrossCheck legacy and incentives for newsrooms to collaborate) Skepticism (competition and unwillingness to collaborate) Eight newsrooms attended; two signalled interest in participating in collaborative project to fight misinformation in Brazil 	 Purpose: Decide collectively what a collaborative project to monitor and debunk disinformation in Brazil might look like No decisions about formally signing up took place at the meeting, but it gave participants enough information to take back to newsrooms Content: First Draft presentation (CrossCheck legacy and incentives for newsrooms)

- 2nd WO Establis Scope and p electi cross 🖸 Abraji partn ● Grant partici newsr Pro bo couns Ocomprova as the
- (official sources)
- and verification (unofficial sources) Brazilian political, media, and disinformation
- outlook Pros and cons of a collaborative project
- Design sprint (project modeling)

March 12 2018	May 27-29 2018
2nd WORKSHOP	воотсамр
 Established: Scope (verification and presidential election, crosscheck) Abraji as operational 	 Established: Connections and a trusting relationship among partners Creation of a deliberative council
 partner Grants for participant newsrooms Pro bono legal counseling 	Consolidated: Guidelines Principles for monitoring techniques Workflow processes

- How to publish project name
- Signed-in members: UOL, Jornal do Commercio)
 - Potential policy and cultural issues to be explored by bad actors during
 - the presidential campaign **Tools lessons:** Social media and
 - verification tools CrossCheck case studies
 - **Meetings:** Platform representatives (Google, Facebook)
 - and WhatsApp Attendance: • Coalition partners,
 - including verifiers, editors

June 28 2018 June 27 2018 ABRAJI PARTNERS LAUNCH 24 partners AFP Brasil, Band TV, (CrowdTangle, NewsWhip, and Verification test Q&A on the coalition Ocomprova five guiding principles: accuracy, fairness and impartiality, independence,

Rádio Bandeirantes, **Band News, Correio** do Povo, O Estado de S. Paulo, Exame, Folha de S.Paulo. Futura, Gaúcha ZH, Gazeta Online, Gazeta do Povo, Jornal do Commercio, Metro Brasil, Nexo Jornal, Nova Escola, NSC Comunicação, O Povo, Poder 360, Rádio Band News, revista piauí, SBT, UOL and Veja

August 5 2018

1st DEBUNK Parties will receive European Union BRL \$1.7 billion from the Electoral Fund for campaigns

3

August 16 2018 **10th DEBUNK**

did not ask for

for Lula's arrest

retaliation to Brazil

BOLSONARO **ATTACKER DEBUNK** • Photo in which

Bolsonaro aggressor appears next to Lula is a montage

September 10 2018





6 🤤

ween the audience and Comprova

ence submitted via

include follow up

prova team to

ts in their private

September 27 2018

• "Erotic bottle" were

not distributed in

day care centers

BOTTLES DEBUNK

EROTIC BABY

by PT

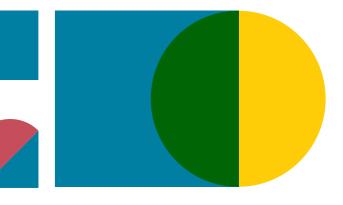


• George Soros did not finance movement #nothim against Bolsonaro

October 28 2018

146th DEBUNK

• Video in which Malafaia criticizes Bolsonaro is from 2017



Executive Summary

By Claire Wardle, Director, First Draft

Comprova was an ambitious, collaborative journalism project that focused on verifying or debunking questionable stories published on social media and within messaging apps during the 12 weeks leading up to the Brazilian 2018 presidential election. Facilitated and supported by First Draft, the project involved 24 of Brazil's largest newsrooms and included 59 journalists and editors, aided by an additional three First Draft staff members.

Designed to provide a trusted source of information for Brazilian voters, Comprova's ambition was to prevent the duplication of newsrooms verifying the same content, to consolidate the verification effort, and to ensure that quality information was amplified via the large audiences that already engage with the 24 news brands.

Comprova was inspired by the CrossCheck methodology, devised by First Draft's Managing Director, Jenni Sargent, and first tested in the lead up to the 2017 French presidential election. CrossCheck France brought together 37 organizations (33 of them local and national newsrooms) between the end of February until early May 2017, to collectively debunk misinformation relating to the election and to publicly share responsibility for the accuracy and transparency of the resulting reports.

To 'CrossCheck' a report means reviewing and approving the verification steps taken by another newsroom, adding the logo of your organization alongside other contributing partners, and then amplifying the report to existing audiences.

After the French election, First Draft commissioned three researchers (Nikos Smyrnaios, Sophie Chauvet and Emmanuel Marty) to evaluate the impact of the project, both on the participating journalists and on the audiences that engaged with the output.

During their evaluation, they concluded that:

- 1. Collaboration between journalists improved the quality of their coverage.
- 2. Making journalists accountable to one another incentivized them to improve their skills.
- 3. Encouraging competitors to work together helped build a sense of solidarity across newsrooms about the role of journalism in an age of misinformation, which is increasingly important in the face of new authoritarian threats against press freedom.
- 4. The design of CrossCheck, bringing normally competitive news brands together to report collaboratively, appeared to enhance the perceived credibility of the coalition.

The findings appeared almost too good to be true, and as is the case with most research, there were important limitations. Interviews with journalists were only carried out after the project had finished. More significantly, the audience research was carried out with a sample of

participants that actively responded to researcher requests. Therefore, it is likely that this self-selected sample of participants had been more engaged with the output and were more positive about the project than general audiences.

When First Draft rolled out the Comprova project, it was decided the evaluation needed to build on the existing CrossCheck France research, and this time the known limitations of the first evaluation would be tackled by expanding the research design to include representative surveys and experiments. As a result, this report is the most comprehensive evaluation of a collaborative journalism project to date.

Described in detail in this report, the evaluation demonstrates that the CrossCheck model does work: it has significant impact on the journalists who participate—and by extension their newsrooms—and likewise has a clear, positive impact on readers and audiences.

Comprova Research Questions

- 1. How did journalists collaborate with one another to debunk misinformation?
- 2. How did participation in Comprova impact the journalists and their newsrooms?a. Did collaboration between journalists improve reporting standards?
- 3. How did Comprova impact its audience?
 - a. Did they find Comprova's reporting useful?
 - b. Did they share Comprova's content?
 - c. Did Comprova's reporting change people's beliefs?
- 4. What types of misinformation were sent to Comprova via its WhatsApp tip line?
- 5. Who did Comprova reach via social media?
 - a. Was Comprova effective at reaching a diverse audience?

Our multi-method evaluation included the following seven separate elements:

- 1. A two-phase survey with 26 journalists who participated in the project.
- 2. Two phases of semi-structured interviews with journalists who participated in the project.
- 3. Analysis of 18,500 WhatsApp messages and the shared Google Docs used by participating journalists.
- 4. Analysis of 120,941 messages with relevant tips, from a total of 242,124 messages submitted to the central tip line from the audience.
- 5. Analysis of the social media campaigns on Facebook and Twitter that were designed to increase engagement with Brazilian citizens. More than 2.5 million social engagements across the platforms used for Comprova were examined on Facebook, Twitter, Instagram, and YouTube.
- 6. A survey with 715 Comprova audience members.
- 7. A survey experiment with 511 Brazilian adults to examine whether or not reports changed people's beliefs.



Comprova was a massive effort. Below is a breakdown of numbers that demonstrates what was achieved in the 12 weeks of the project.

Stories	1,750	Number of original articles published by Comprova partners based on reporting by the Comprova project
	146	Number of Comprova reports published on projectocomprova.com.br
Social Media	2,711,578	Total engagements on social media related to Comprova content
	1,358,422	Total engagement with content on the <u>Comprova Facebook</u> <u>Page</u>
	754,562	Total engagement with all Comprova-related stories on the partners' Facebook and Twitter pages
	598,594	Total engagement on Facebook and Twitter when partner newsrooms posted Comprova reports on their social accounts
	135,000	Number of <u>Comprova's Facebook Page</u> followers
	18,000	Number of Twitter followers for <u>@comprova</u>
	3,413	Number of Instagram followers on @projetocomprova
	573	Number of Facebook and Twitter posts that mentioned Comprova
	466	Number of Comprova <u>YouTube channel subscribers</u>
	6	Number of <u>Twitter Moments</u> designed to teach verification techniques to audiences
WhatsApp	350,567	Total number of interactions between the audience and Comprova journalists on WhatsApp
	78, 462 (48,488) (24,345) (4,831)	Number of files containing tips and supporting evidence submitted via the public Comprova WhatsApp number (images) (video files) (audio files)

67,870	Number of new tips sent in from the public (doesn't include follow up responses)
108,443	Number of WhatsApp messages sent from the Comprova team to individual members of the audience
18,154	Number of messages shared by Comprova journalists in their private WhatsApp group

Key Findings

Impact on audiences

- → Comprova reached a significant percentage of the Brazilian population. By convening a coalition of existing, large news organizations, it was possible to create a new brand in 12 weeks. Our audience survey, representative of the Brazilian population who use the internet, demonstrated that almost 25 percent of those surveyed had heard of Comprova.
- → **Comprova's reports worked.** In an experimental setting, Comprova's reports changed readers' beliefs. However, we failed to find evidence that the number of partner logos attached to a report changed its efficacy or Comprova's credibility.
- → A majority of the audience saw Comprova as neutral and trustworthy, as providing information they didn't know otherwise, and used it to inform others.
 - **79.6 percent** of respondents completely or partially agreed that Comprova was trustworthy.
 - **81.5 percent** of respondents completely or partially agreed that Comprova was accurate.
 - **76.4 percent** of respondents completely or partially agreed that Comprova was fair.
 - 77.9 percent of respondents completely or partially agreed that Comprova "tells the whole story."
 - **70.1 percent** of respondents considered Comprova to be ideologically neutral.
 - ◆ **78.4 percent** of respondents completely or partially agreed that Comprova gave them information they did not know previously.
 - **Over 70 percent** said they shared Comprova content for the purpose of informing others.
- → 40.4 percent of respondents completely or partially agreed that Comprova helped them to decide their vote in some way.

Impact on participating journalists



- → The experience of working for Comprova was largely positive. Journalists believed that their participation provided short- and long-term benefits in verification skills learning, professional morale boost, and editorial standards improvements.
- → One significant takeaway for journalists was learning that mutual accountability as an industry acted as a key element in preventing errors in reporting.

Impact on participating newsrooms

→ Newsrooms with involved personnel reported improved social newsgathering and verification skills, and said Comprova acted as a catalyst to launch new debunking products.

Lessons for understanding misinformation on WhatsApp

- → Misinformation takes many formats on WhatsApp, including audio, video, and text.
- → WhatsApp is a mostly closed environment. There were very few links to the wider web, likely caused by the 'zero rating' that Facebook has negotiated in Brazil with internet service providers which allow customers to use Facebook, Instagram and WhatsApp for free outside of a monthly data charge. Because links to websites might add charges to a data plan, few links are exchanged on WhatsApp.
- → The most viral messages, according to our sample of submitted tips via the central Comprova WhatsApp number, were from Jair Bolsonaro's voters worried about the election integrity.
- → Comprova editors couldn't find a number of conspiracy theories that tippers shared with them when searching the larger web, which made verification work more challenging.

Lessons for future collaborative projects

- → Effective collaborations take time, time to build systems, develop trust, to get buy-in from management, and to reach and engage audiences.
- → Targeted advertising can make a significant difference when trying to reach audiences, which was particularly true of reaching people who are not typically engaged with content produced by partner newsrooms. Ad credits provided by Facebook and Twitter made a real difference to the reach of Comprova.

Conclusions

Collaborative projects work. They have a significant impact on individual journalists, the newsrooms that participate, and the wider news industry.

In addition, these projects produce incredibly important data sets for improving our understanding of the challenges associated with misinformation, for example: what



misinformation exists and on which platforms? How do audiences understand misinformation? What works in terms of effective debunking techniques? And how can we reach audiences who are most susceptible to misinformation? The Comprova project resulted in a dataset of more than 250,000 pieces of misinformation submitted by the audience via WhatsApp. The multiple benefits of collaborative projects -- including newsroom impact, providing audience digital literacy skills, understanding how information travels online, etc. -- has to be recognized.

In countries like Brazil, which have a combination of many paywalls on news sites and a zero-rating practice that excludes time spent consuming content on WhatsApp and Facebook from counting against monthly data caps, the scales are stacked in favor of people seeking out more of their information from spaces without gatekeepers. Paywalls and zero-rating are justification enough for projects like Comprova, which provides open, paywall-free access to reporting and contextual information around viral hoaxes and rumors online.

Comprova research however raises important questions about the long-term sustainability and business models for such collaborations, and the need to expand the model beyond simply publishing debunks. Misinformation doesn't end on election day and the amount of time and energy spent developing projects like this is difficult to justify when funding and momentum stops.

The model for future collaboration is laid out in a case study below and details how reporters from multiple newsrooms worked together for six days to investigate a viral YouTube video of Hugo Cesar Hoeschl. He described himself as an expert in electoral statistics, and using a mathematical equation known as Benford's law, he doubted the integrity of the Brazilian electronic ballots system. The complexity of this investigation is described in this report, and underlines the benefits of so many newsrooms working together to demonstrate that the claim had no foundation, and to amplify reporting at its conclusion. We need to find a model for making these types of projects sustainable for the long term.

Introduction

Angela Pimenta, Operations Director, Projor

During the 12-week period leading up to the Brazilian 2018 presidential campaign, journalists from 24 newsrooms worked together to verify questionable content published on social networks and messaging apps. The project was based on First Draft's CrossCheck project, a collaborative verification initiative undertaken in France during the lead-up to its presidential election in May 2017. To launch Comprova, First Draft facilitated a series of meetings and trainings in the first half of 2018 between the Brazilian newsrooms; provided the methodology, editorial, and technological support; and aided the growing coalition of 24 outlets as they made the project their own.

Spread throughout the vast Brazilian territory, in order to communicate remotely, newsroom partners created a WhatsApp group, with journalists dreaming up the playful description



"Comprova Verificadores" as the name of the group.¹ The smartphone application WhatsApp is widely popular in Brazil, and in the context of the Comprova workflow, it became a central piece of communication among partners, marked by fragmented conversations and constant uploading of social media content. The workflow also included Google Docs, used to draft posts and make editorial comments, as well as the project's central website content management system (CMS), where the final verification drafts were posted for final peer review.²

To be published, reports required at least three media partners to agree with the verification process and the final draft, a process known as "crosschecking." To verify content, the collaboration partners were taught verification tools and checklists, using First Draft's online course and in-person training.³

Partner work was supported by an editorial team hired by Comprova—full-time editor Sérgio Lüdtke and two part-time assistant editors, José Antonio Lima and Rafael Garcia-and also by Daniel Bramatti, president of Abraji, the Brazilian Association of Investigative Journalism and the project's operational partner.

In late June 2018, during the final phase of coalition-building, First Draft provided the media partners with language for five editorial guiding principles: accuracy, fairness and impartiality, independence, transparency, and ethical responsibility. Asked to comment and vote on the principles, the coalition approved them. In terms of ethical responsibility, partners committed themselves to the principle sometimes called "strategic silence" to ensure that additional oxygen was not given to rumors and false information. Thus, the project did not link out to problematic content or provide legitimacy to information circulating in small, niche communities.

The coalition also created an editorial board comprised of senior representatives from 10 volunteer newsrooms with rotating supervisory roles to arbitrate on any unintended patterns of bias and conflicts. It was additionally agreed upon that all newsrooms were accountable to each other and understood that their individual output would receive the same scrutiny from the Comprova project as any other source.

The Comprova governance framework was critical to establishing a growing sense of trust and interdependency among newsrooms that are used to a fiercely competitive environment. A survey of participating journalists at the end of the project showed that almost 90 percent of them did not have prior collaborative networking experience.⁴

Despite the challenges of competing newsrooms collaborating to debunk political content in a highly polarized campaign with 13 political candidates, Comprova's editorial board never had to

(2016). Available at: https://firstdraftnews.org/the-first-draft-toolbox-for-newsgathering-and-verification/ ⁴ Lüdtke, S. (2018) How collaborative journalism worked with Comprova. Available at:

https://medium.com/1st-draft/how-collaborative-journalism-worked-with-comprova-4b0a15a3cdad



¹ The use of Slack, a popular collaborative messaging platform was discussed, but a majority of the newsrooms in the coalition had not used the program, and were nervous about introducing a new platform into a process that was already requiring them to learn so many new tools elsewhere.

² Proieto Comprova (2018). Available at: https://proietocomprova.com.br/

³ A list of tools and sites recommended by the First Draft Coalition to help in social newsgathering and verification.

exercise its arbitration powers. "We managed to do it without any conflict, which I think is amazing," said Comprova's editor. "Almost 150 verifications, an average of two to three people in each, and we had no conflicts. Everything worked in a very proactive way."

To carry out the work, the Comprova team agreed on the project scope: to only investigate suspicious user-generated content (UGC) about the presidential race.

In deciding whether or not to publish a report, the team agreed that any piece of content would have to meet two criteria:

- 1) Significant risk for the public debate integrity
- 2) Significant engagement and shares across social platforms and messaging apps

The team used available tools to measure the criteria, but the decision to publish was primarily an editorial one. Decisions always considered the numbers, though not exclusively; engagement can be measured by tools, but risk requires editorial evaluation.

As in the CrossCheck project in France, Comprova also relied on a horizontal collaboration model based on consensus.⁵ Reaching consensus meant constant negotiation among reporters and editors on each step of the workflow to achieve the crosscheck, a working process described in detail by Sérgio Lüdtke in an article published following the project's conclusion.⁶

Accustomed to functioning in highly hierarchical newsrooms, the opposite was true for partners who worked for Comprova, as all team members were encouraged to comment, intervene, and propose solutions, even for verifications in which they were not directly involved. Actively engaged in daily discussions, 59 team members, including 49 journalists (verifiers, editors, and partnering newsrooms representatives) exchanged more than 18,500 messages during the project on WhatsApp.⁷

Most of these messages related to Comprova's workflow, the first step of which was to monitor social media and messaging apps to find verifiable UGC. Once a claim was selected, a team of journalists was assigned to probe it, applying both forensic tools and newsgathering protocols. In doing their work under pressure, journalists often faced challenges such as finding the original provenance of a content item, detecting content manipulation, reaching and getting feedback from sources, and examining scientific reports. Aimed to preserve the public debate integrity, the fight against misinformation meant following strict editorial protocols to debunk falsehoods as fast as possible. While journalists dropped open verifications that were determined to be inconclusive or lacked editorial relevance, most of the editorial challenges were overcome during the production of 147 published verifications.

⁷ The WhatsApp group also included social media consultants, First Draft team members, management staff, and institutional partners.



⁵ Smyrnaios, N., Chauveau, S. & Marty, E. (2017) The Impact of CrossCheck on Journalists & the Audience Learning the lessons from a collaborative journalism project fighting disinformation online during the French Presidential Election. Available at: https://firstdraftnews.org/wp-content/uploads/2017/11/Crosscheck_rapport_EN_1129.pdf/ ⁶ Lüdtke, S. *op. cit.*

Why Did We Think There Was a Need for Comprova?

Claire Wardle, Director, First Draft

Collaborative journalism is becoming increasingly popular, as evidenced by the <u>Center for</u> <u>Cooperative Media</u>, the International Center for Investigative Reporting's <u>Panama</u> and <u>Paradise</u> <u>Papers</u>, ProPublica's <u>Electionland</u>, and, most recently, the <u>California Reporting Project</u>. But collaborative projects are difficult to get going, and require a great deal of logistical planning and support. Here, let's focus on why First Draft decided to build a collaborative project in Brazil, and what steps were needed to get the project off the ground.

At First Draft, we have facilitated two kinds of projects to monitor information disorder around elections. One has taken the form of creating a temporary newsroom, filled with short-term staff, tasked with monitoring, verifying, and publishing "alerts" connected to disinformation circulating online ahead of an election. The temporary newsroom-type of project took place in the UK in the lead-up to the June 2017 election, in <u>Germany</u> during the September 2017 election campaign, and in the five months ahead of the US midterm elections in November 2018.

In these examples, newsroom partners received email and Slack alerts, and during the US midterm project, a community developed on Slack between journalists at local and national newsrooms. They would ask questions, and share links and tips with other journalists at different newsrooms.

While these were useful projects to newsrooms, we struggled to call them collaborative. The setup mirrored a news agency, where newsrooms passively received information from the central First Draft "news agency"—so collaboration between newsrooms was minimal.

We have supported a second model that has been truly collaborative and aimed to give the public information about what newsrooms surface. We used this open model in <u>France</u>, Brazil, and, most recently, <u>Nigeria</u>. The French CrossCheck project launched at the end of February 2017 and involved more than 30 different partners working together to find, verify, and report on examples of mis- and disinformation circulating ahead of the French election.

It was a unique methodology designed to:

- minimize the resource allocation any one newsroom would need for debunking and verification initiatives;
- ensure that any debunking was amplified via established newsrooms with large audiences to reach the largest possible number of people;
- coordinate coverage, as academic research shows that audiences often need to see multiple, similar reports for information to be noticed and processed;

- provide support to smaller, local newsrooms that do not have the staffing to do this type of work but maintain very high levels of trust with their audience;
- provide newsrooms with a project to practice social discovery and verification beyond a training classroom; and
- minimize any mistakes from participating newsrooms by providing a framework so different newsrooms held each other to account.

During <u>the evaluation</u> of CrossCheck France, we found that those journalists who had taken part in the project were extremely positive about the impact of CrossCheck on improving their skills around social discovery, verification, and responsible reporting of misinformation.

Editors reported being pleased with having more content to advertise against, while only having to dedicate one staff member to the project.

Audiences reported higher levels of trust in the output from the CrossCheck project, believing it to be more credible and authentic because normally competitive newsrooms were working side by side.

The results of the French CrossCheck evaluation seemed too good to be true, and we wanted to see if the project would have the same effects if replicated in other locations. We were also particularly interested in working in a country where there was a high penetration of closed messaging apps. Brazil, one of the world's largest democracies, was going to the polls in October 2018, and the country's high usage of WhatsApp made the prospect of a project there a potentially attractive case study. We were being told that the campaign was likely to be the most polarized one since 1989, marking the deepest institutional crisis since redemocratization. The <u>Edelman Trust Barometer</u> also showed that between 2017 and 2018 trust in the Brazilian media had dropped 17 percent.

Certainly Colombia and Mexico (going to the polls in June and July, respectively, in 2018) were also very interesting potential locations, but we wanted to make sure we gave ourselves enough time to get the project in motion. In France, where we already had strong connections, it was trying enough to get that project underway. First Draft had no real connections in Latin America, so we knew we had to build relationships before we did anything else.

We had learned during the French election project in 2017 that true collaborative projects are difficult. The final results are wonderful, but the process of launching a project like this is often not fully understood or appreciated.

Over the course of eight months, the First Draft team traveled to Brazil five times. We hosted one high-level meeting, two design sprints, a bootcamp, a five-hour training with more than 40 journalists, and a high-profile launch at the investigative reporter's congress led by Abraji. What follows aims to lay out everything that took place to get the project off the ground and is best read alongside the timeline.



In November 2017, I traveled to Brazil to speak at the Festival 3i in Rio de Janeiro, a conference celebrating independent journalism. I gave a presentation about CrossCheck France and floated the idea to the room of journalists that a similar type of project might work in Brazil.

The following day I flew to São Paulo and met with eight senior editors at the Google office to see if there was any interest in a collaborative election project. Google News Lab, which had supported us in France and had resourced the project's evaluation, invited the editors at our request that we convene a cross section of the largest media outlets in Brazil.

At this meeting, I presented the positive findings from the CrossCheck evaluation report, and answered all of their questions. There was interest, but a lot of concern that a project like this would struggle to take off in Brazil. The only non-editor was Angela Pimenta, the Operations Director of <u>Projor</u> (and author of two of the sections in this report). She pushed hard for the project, and played a critical role as a neutral observer and advocate.

The feedback from the meeting was positive enough for people to suggest getting more partners together. Between mid-November 2017 and late January 2018, we identified a group of 30 journalists through a range of techniques (talking to academics, other journalists, and journalism organizations). A local project manager, Adriana Garcia, assisted us on the ground. One critical conversation we had was with Daniel Bramatti, president of <u>Abraji</u>, the Brazilian Association of Investigative Journalism. While he was supportive in principle, Bramatti wasn't sure how Abraji could participate since its charter made it clear that it couldn't be involved in producing content.

We returned to Brazil in early February to run a "design sprint" as part of a small workshop in São Paulo with 30 journalists. We shared the project plan from France, and asked people to think about whether such a methodology would work in Brazil—and if not, how it could be changed.

We asked participating journalists whether the project should include fact-checking politicians' claims or just the verification of user-generated content shared online; whether the project should just apply to the national presidential election, or whether it should also include the local elections; which newsrooms were missing; and whether organizations would want journalism students attached to their newsrooms, or if they would prefer to manage the work themselves.

There was a great deal of positivity in the room, but there was still a lot of concern among the journalists about how their editors would react. Was a project like this doable? Who would fund something like this? Could Abraji act as the neutral, central organization?

It was agreed that First Draft would facilitate another workshop in early March, which would be run in a similar fashion to the February event but with more of the logistics sorted. By this second event, momentum was building. Google and Facebook promised to support the project, and Abraji had agreed to act as the lead organization.

There were still many details to work out, including getting buy-in from newsroom leadership. While these design sprints were full of enthusiastic reporters, there weren't many editors in the room who could confirm their participation on the spot.

By the end of April, we had 24 newsrooms signed up. We held weekly webinars to continue to collect partner input on the project's direction, and to make sure everyone felt confident about the process. The partners agreed on the name Comprova and signed off on a logo.

At the end of May, we hosted a bootcamp at a former coffee plantation one hour outside São Paulo. The bootcamp was designed to allow one editor from each newsroom to attend. We wanted each newsroom to understand the project and how it would be structured. Over two and a half days, we explained the methodology, and answered questions. Grégoire Lemarchard, AFP's deputy editor and someone who played a pivotal role in the CrossCheck France project, flew over from Paris to share his experiences with the Brazilian journalists. The most important aspect of the bootcamp was that the partners began to build trust with one another. As we had done during the French bootcamp, participants were encouraged to spend the full amount of time with each other, which included late-night karaoke sessions.

After the bootcamp, we continued weekly webinars, although First Draft took a back seat. The calls all took place in Brazilian Portuguese with First Draft staff only there to answer questions if necessary.

At the end of June, we returned to São Paulo and I ran one five-hour training session with all of the reporters assigned to the project (these participants were distinct from the editors who attended the bootcamp). The training session included teaching advanced discovery and verification skills, introduced the Comprova platform, and used case studies to develop trust and an understanding of the process.

The following day, Comprova was officially launched at Abraji's annual congress. Representatives from the different newsrooms appeared on stage to demonstrate the range of organizations that had agreed to sign up.



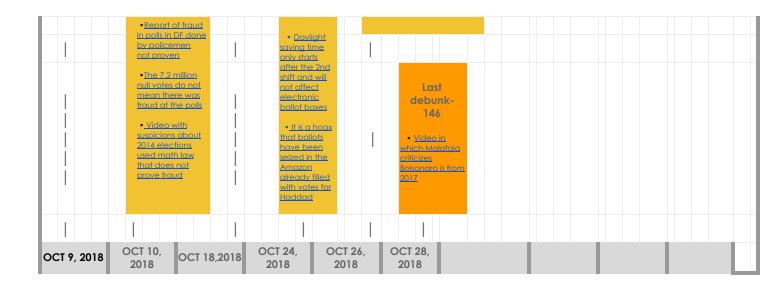
Here is a timeline of all the different elements of the Comprova project:

Comprova Coalition Timeline

First meeting		2nd workshop		
First Draft presentation (CrossCheck legacy and		Established:	Abraji	Hard launch
incentives for newsrooms		 Scope 	partners	
to collaborate)		(verification	training	
• Skepticism		and	(same day as the	
(competition and		presidential	1st World Cup	
unwillingness to		election,	Brazil team match)	
collaborate)		crosscheck)	Content:	
Eight newsrooms		 Abraji as 	Monitoring	
attended; two signaled		operational	techniques	1
interest in participating in		partner	(CrowdTangle,	
collaborative project to		Grants for	NewsWhip, and	
fight misinformation in Brazil		participant	TweetDeck)	
DI QZII		newsrooms • Pro bono	 Verification 	
		• Pro borio legal	test	
	1st	counseling	 Q&A on the coalition 	
	worksho	Comprova	counter	
	р	as the project	Established:	
		name	•Comprova five	
	Purpose:	 Signed-in 	guiding	
	•	members:	principles:	
	Decide	UOL, Jornal do	accuracy,	
	collectiv	Commercio	fairness and	1
	ely what a		impartiality,	
	collabor		independence, transparency,	
	ative		and ethical	
ANJ meeting	project		responsibility	
	to		Monitoring	
Content:	monitor		workflow	First verification
First Draft	and		responsibilities	
presentation	debunk		 Advisory 	Parties will receive
(CrossCheck legacy) and	disinfor		board	BRL \$1.7 billion from the Electoral Fund
expanded	mation		guidelines	for campaians
version with	in Brazil might		Weekly	
incentives for	look like		coalition calls (Zoom)	
newsrooms to	•No		Slack as the	
collaborate,	decision		coalition team	
including	s about		messaging tool	
learning	formally		WhatsApp	
monitoring and	signing		public line	
verification skills,	up took		strategy	
synergy against	place at			
disinformation, and more traffic	the		Attendance:	
with published	meeting		Coalition	
debunks	,but it		partners,	
	ticipants		verifiers, editors,	
Partnership:	enough		and managers	
UOL and	informati		who did not	
Jornal do	on to		attend previous	
Commercio	take		Comprova-elat	
decided to sign	back to		ed events	
on. Folha de S.Paulo and	newsroo			
S.Paulo and Nexo Jornal	ms			
signaled they	Contrati			
could also join	Content: • First			
	Draft			

		(CrossC heck legacy and incentiv es for newsroo ms) • Fact checkin					
1	1	g (official sources) and verificati on (unoffici al sources) • Brazilian political, media, and disinfor mation outlook • Pros and cons of a collabor ative project • Design sprint (project modelin g)	Bootcamp Established: • Connections and a trusting relationship among partne • Creation of or deliberative council Consolidated: • Guidelines • Principles for monitoring techniques • Workflow processes • How to publit debunks	rs A	Abraji soft launch Coalition (24 vehicles): • Band, Correio, Correio do Povo, O Estado de S. Paulo, Exame, Folha de S. Paulo, Gaúcha ZH,	I	Soy crop verification
			Cultural issues t be explored by bad actors during the presidential campaign Tools lessons: • Social media and verification tools • CrossCheck case studies Meetings: • Platform representative (Google, Facebook) and WhatsApp Attendance: • Coalition partners, including verifiers, edito	r n d	Gazeta Online, Gazeta do Povo, Jornal do Commercio, Metro Brasil, Nexo Jornal, Nova Escola, NSC Comunicação, O Povo, Poder 360, piauí, SBT, UOL, and Veja		the name of Bolsonaro in crop fields
NOV 13, 2017	DEC 7, 2017 FE		rrch 12, May 27-29, 2018 2018	un 27 2018		AUG 6, 2018	AUG 8, AUG 14 2018 2018

10th debunk 1s and 2nd e-ballot debunks 100th debunk debunk 0 -George Soros did not finance movement #nothim against bolsonaro -Ballot finance movement #nothim against Bolsonaro -Ballot in which Haddac												6th
10h debunk ballot												e-ballot
10h debunk debunks debunks <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>100</td> <td>h debunk</td> <td>debunk</td>										100	h debunk	debunk
• Concentration • • • • • • • • • • • • • • • • • • •	10th	debunk										
 	•				•Elec	stronic balllo				<u>#noth</u>	<u>iim against</u>	in which
array array balance		retaliation to			code	<u>es have not</u>				<u></u>		<u>s voting</u>
							Er					is larger
I I I I I I I I I							En					total of
I Image: Section constrained if radge controlled in fage contr					cand	lidate's		"Erotic bottle" were				
$ \begin{array}{ c c c } \hline \begin{tabular}{ c c } \hline \begi$					voter	's signed	na	ot distributed in day				
1 20th debunk according control of the control of					lead	to arrest						
1 2014 debunk according 2026				Bolsona	allow	to confront						
				-	acco							
1 20h de bunk					• Six							
1 2010 decount 1 <t< td=""><td></td><td></td><td></td><td>• Photo</td><td>date</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>				• Photo	date							
		20th debur	nk	in which								
I Image: Second s				Q		3rd e-ball	ot			C	lebunk	
I I		favorable to L	Lula"	r								
Image:				<u>next to</u>							adulterated	
I I						use of electroni	ic ballot					
1 1						boxes is mislead	ding	4th e-ballot de	ounk			
I I										-		
2018 2018 SEP 10 2018 SEP 20 2018 SEP 20 2018 2018		1			1							
2018 2018 SEP 10 2018 SEP 20 2018 SEP 20 2018 2018				I	1					I		
2018 2018 SEP 10 2018 SEP 20 2018 SEP 20 2018 2018				1			· ·				1	
2018 2018 SEP 10 2018 SEP 20 2018 SEP 20 2018 2018	AUG 16	AUG 10	CED 10		50.00.0019	SED 0/ 2019	SEP 27	SED 00 2010	OCT	3rd	OCT 5th	OCT 044 2019
The-ballot debunk • the ballot debunk	2018	2018	SEP IC	2010 3	EP 20 2018	SEP 20 2016	2018	3EF 20 2010	201	8	2018	OCT 811 2016
7th e-ballot debunk . Utspit debunks • Note controls number . Utspit debunks • Note control number . Utspit debunks												
7th e-ballot debunk • balsonard's number appeared as "null" in videas because voters voted for governor. • Uns seized in Paraná have not even been audited and there is no. evidence of fraud • Uns seized in Paraná have not even been audited and there is no. evidence of fraud • Uns seized in Paraná have not even been audited and there is no. evidence of fraud • Uns seized in Paraná have not even been audited and there is no. evidence of fraud • Uns seized in Paraná have not even been audited and there is no. evidence of fraud • Uns seized in Paraná have not even been audited and there is no. evidence of fraud • Uns seized in Paraná have not even been audited and there is no. evidence of fraud • Uns seized in Paraná have not even been audited and there is no. evidence of fraud • Uns seized in Paraná have not even been audited and there is no. evidence of fraud • Uns seized in Paraná have not even been audited and there is no. evidence of fraud				11th		ballot						
•Bokenaro's number. •Bokenaro's number. appearted as "null" in videos because voters voted for •Uns seized in Parané have not even been audited and there is no. evidence of froud	7th e-b	allot debunk				ist and						
Automated of willing automated of willing because voters voted for governor Ums seized in Parané hove not even been audited and there is no evidence of froud 1 1 8th, 9th, and 10th e-ballot 10th e-ballot 10th e-ballot 10th e-ballot 10th e-ballot	_			ther	refore did not s	et up						
covernor i </td <td>appeared a</td> <td><u>as "null" in videos</u></td> <td></td>	appeared a	<u>as "null" in videos</u>										
I I I I I I I I I I I I I I I I I I I I I I I I		oters voted for										
Image: Sector of the sector of th				aud	lited and there	<u>is no</u>						
8th, 9th, and 10th e-ballot 13th and 14th • <u>Video of un with defective</u> keyboard does not prove debunks e-ballot				evic								
10th e-ballot 14th keyboard does not prove debunks e-ballot voting fraud			•			15	h e-ballot	debunk				
debunks e-ballot voting fraud	1			1								
						the second se		t prove				



What Did Audiences Send Comprova via WhatsApp?

Pedro Burgos, professor at Insper, ICFJ Knight Fellow

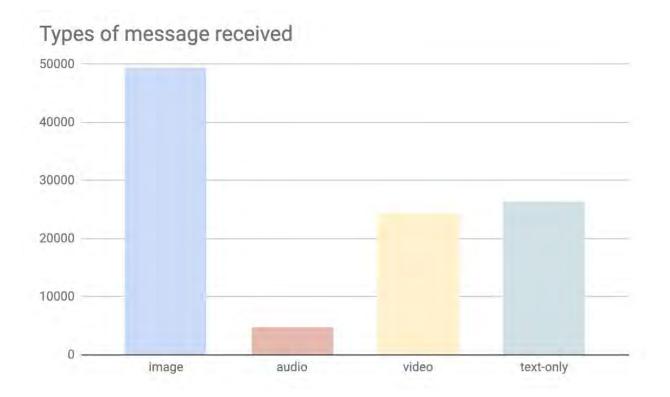
Comprova had one central tip line on WhatsApp. During the 12 weeks of the project, we received 105,078 messages from the audience, which included suspicious claims, images, video, or audio messages for the team to debunk. Due to WhatsApp's end-to-end encryption, this method of soliciting tips is the only possible way to collect misinformation data without violating the app's terms of service. While there is some degree of self-selection bias, the sample appears to be representative of misinformation that the Comprova team saw in other networks, with some peculiarities of the messaging platform.

This data came from an overall data set of 242,124 messages that were received or sent during the project. Many of these were welcome messages or replies wherein Comprova journalists asked for more information to help with the verification process. So that we could evaluate a clean corpus of data, these additional messages were removed for the purposes of this analysis.

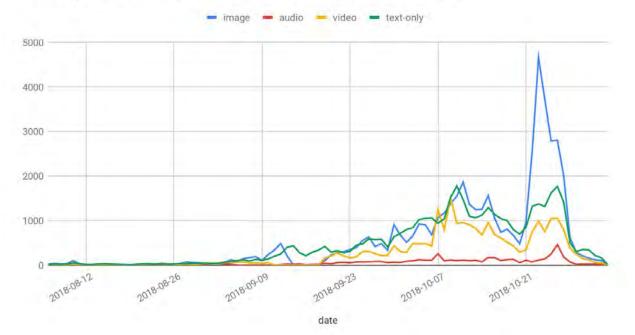
What made this data collection possible was the use of Zendesk, a customer service platform that interacts and collects messages from WhatsApp. All messages sent to Comprova's WhatsApp phone were routed through Zendesk, and because this service has an application program interface (API), we were able to collect structured data, as well as download the 87.6 GB of attachments, among other benefits and some drawbacks.

If one message could represent all misinformation that circulated on WhatsApp during the 2018 presidential election season in Brazil, it would be something like this: a real picture, out of context, showing electronic ballot boxes, denouncing electoral fraud to harm (now President) Jair Bolsonaro. That picture would be coupled with a short text mixing real and false misdoings from the opponent's party, urging everyone to share it wildly.

Together with data reporter Bernardo Vianna, we were able to sort messages by type and, using various computing techniques, group similar images, audio and video files.



Messages received by Comprova's WhatsApp number by type



FIRSTDRAFT

17

As more people became aware of Comprova's tip line, the number of messages we received increased. Beyond the natural progression, the chart also shows some spikes around the first and second round of voting (October 7 and October 28), mainly because of the accusations of electoral fraud.

A big portion of messages forwarded to Comprova were image files, usually real pictures with partisan captions. Official documents or real news stories taken out of context and screenshots (of real and false conversations) were also popular. Classic memes, with a big text overlay were less common in Comprova's database, possibly because as propaganda or humorous pieces they don't purport to be true, so are less debunkable. Research <u>from Federal University of Minas</u> <u>Gerais (UFMG)</u> showed a similar pattern in terms of themes.⁸

Image 1

Caption: A picture of a criminal gang apprehended by police, together with the image of a check for R\$68 million was forwarded to Comprova 862 times. Both images were real, and were taken close to the elections. The message that accompanied the images alleged—with no basis—that the criminals would use the stolen money to fund Haddad's campaign.

Image 2

Caption: This screenshot, shared 663 times, shows a false conversation between former Petrobras President Jose Sergio Gabrielli and Fernando Haddad. In the exchange, they are coordinating attacks on Bolsonaro together with Folha, one of Brazil's largest newspapers. In <u>one version of this hoax</u>, the same picture of a check is put forth as proof that Haddad's campaign was paying the media to go after Bolsonaro.

Some of the images were always sent in bulk: an "album" of some 10 photos showing how the Workers' Party helped leftist governments in Latin American (with hit-or-miss captions) was shared with Comprova 225 times. Another album showed official pictures of Workers' Party members meeting with OEA electoral observation missions. The text that accompanied those images alleged that the meeting was secret, with the goal of cheating the results in favor of Haddad (here's <u>Comprova's report</u>).

Image 3

Caption: Candidate Fernando Haddad meets with OEA members.

This screenshot, shared 663 times, shows a false conversation between former Petrobras President Jose Sergio Gabrielli and Fernando Haddad. In the exchange, they are coordinating attacks on Bolsonaro together with Folha, one of Brazil's largest newspapers. In <u>one version of</u> <u>this hoax</u>, the same picture of a check is put forth as proof that Haddad's campaign was paying the media to go after Bolsonaro.

⁸ This research used a different methodology. It collected data from WhatsApp groups where short links to those same groups were available via Google. We relied on data submitted to us because of issues around consent.



While there was much press coverage around the "culture wars" aspect of the elections—a few of Bolsonaro's supporters infamously attributed to Haddad the distribution of "<u>erotic baby bottles</u>" to children—if these messages really went viral, they didn't arrive at Comprova's WhatsApp number en masse. Nothing related to gender issues, abortion, or gun laws appeared in the top 200 images shared. We also ran Google Cloud Vision in every image to extract "entities" (be it a candidate, a symbol, or an object), and there weren't large numbers related to the "culture wars" issues. One might infer that Comprova's tippers were therefore discerning enough that they wouldn't think this type of information should be taken seriously, or that these types of messages were contained in filter bubbles.⁹

Text-based messages followed the same themes, with an emphasis on the claim that electoral fraud took Bolsonaro's win in the first round. Many of the messages that were sent repeatedly to Comprova used the tactics of mid-1990s chain emails. The most widely shared text, received 541 times with the same exact words, claimed that the number of absentee ballots and null voting were inflated by the electoral authority, and ended "if you send this message to just 20 contacts in a minute, Brazil will unmask this criminal. DO NOT brake this chain. The unwary must know the truth."

Text message

Transcripts of audio and video messages were also popular. This viral message claimed that Haddad and his VP, Manuela D'Ávila, would stage them getting beat up, with actors wearing Bolsonaro's T-shirts and swastikas as the culprits. It was shared to Comprova's WhatsApp number 217 times. <u>The video</u> with the same script was shared 445 times.

Brazilians love to send audio messages, and there were a number of viral audio files among the disinformation sample: 30 were sent to Comprova an accumulated 1,642 times, or 33 percent of the total. We analyzed those, and as was the case with images and text, allegations of electoral fraud (always narrating efforts to undermine Bolsonaro's candidacy) accounted for two-thirds of the most viral audios. The most widely shared audio was a version of a video where two police officers talked about electoral ballots being violated. Those officers are <u>under investigation</u>.

While pro-Bolsonaro messages dominated the sample Comprova collected, four of the most popular audio recordings—including the second most shared, sent 208 times—were variations of a conspiracy theory claiming that the <u>stabbing</u> of Bolsonaro was staged.

In terms of quality, most were amateurish. Many recordings were done in a car, with no apparent script, which gave a sense of urgency and authenticity. One of the audio recordings mentioned that Lula, Brazil's president between 2003 and 2010, had a trillion Euros in money and diamonds in Switzerland from someone claiming to be a journalist.

⁹ As noted earlier, the WhatsApp messages in this dataset were sent from audience members who knew about Comprova. They were more likely to be consumers of the mainstream media. We know anecdotally that there was more extreme content available on WhatsApp, but the Comprova team was very aware of debunking any content that hadn't been shared widely, as the publication of the debunk would give additional oxygen to those rumours.



The same can be said for videos: a <u>person in front of a camera</u> shooting with a cellphone was the most common type of video file sent to Comprova. But there was also some strange mixed-media videos. A person reading a parody Facebook Page for United Socialist Republics of Latin America (<u>URSAL</u>) was the second most shared and was received by Comprova 242 times.

Among the most widely shared, the only video that looked more professionally done claimed that <u>Haddad threw a bible in the garbage</u> (he said <u>it was stolen</u>). But most of the videos were scripted op-eds, with many opinions and few facts that could be checked.

In the end, what Comprova received from the public were the same themes in different media forms, with few links to the web. Again, this may be because of zero-rating plans where Facebook has negotiated with a telecom provider to make Facebook, Instagram, and WhatsApp free to use. While there were certainly personal attacks (particularly against Fernando Haddad) and a long tail of disinformation that appealed to conservatives, the most viral messages, according to our sample, were from Bolsonaro's voters worried about—and creating stories around—the integrity of the elections.

While the most common themes found their way outside WhatsApp in YouTube videos and Facebook posts, Comprova editors couldn't find a number of conspiracy theories that tippers shared with them on the larger web, which made verification work more challenging.

Of course, there is still much to learn from the data, as we focused much of our findings in the fat head, not the long tail. Comprova will share our data with other researchers who are interested in this crucial moment in Brazil's history.

How Did Comprova Impact the Journalists Who Were Involved?

Angela Pimenta, Operations Director, Projor

Forty-two, semi-structured phone interviews were conducted with 26 journalists who participated in Comprova. The interviews were done in two waves: one at the beginning of Comprova's publishing phase during the month of August and one immediately after the project ended in early November 2018.

The interviewees are journalists, those who were particularly active in the project-15 reporters have been identified as Comprova participants, five senior editors, and one deputy director of 18 partnering newsrooms. Interviews were also conducted with the Abraji president, the Comprova editor, and three partnering media consultants. From the 26 people interviewed, 16 participated in both interviews.

In order to protect the journalists' identities, their names were replaced by their respective function in the project and were also numbered (e.g., Reporter 1, Senior editor 1). For the same reason, the names of partnering news outlets are redacted.

This phase of the research also included a qualitative analysis of the WhatsApp group used by Comprova journalists to communicate, Google Docs used for collaborative investigations, and the content management system of Comprova's website where the reports were crosschecked.

The data analysis was done through Portuguese-based transcriptions and with qualitative data analysis tool Atlas.ti.

Author's Disclaimer

As a journalist concerned about the informational landscape in Brazil ahead of the 2018 elections, I have actively participated in the effort to build the Comprova coalition. I have done it both as a citizen and as president of Projor, a nongovernmental organization focused on the development of Brazilian journalism. Aware of the successful experience of First Draft's CrossCheck project in France, I was convinced that tackling misinformation in my country would also require a collaborative approach. Heavily impacted by the digital disruption coupled with an enduring economic downturn, Brazilian newsrooms seemed to me unable to meet the challenge of combating misinformation individually. As a dysfunctional democracy penalized by a severe institutional crisis, Brazil has presented disturbing patterns of social media polarization since 2016, including the production of viral falsehoods.¹⁰

Thus, although I strived to produce an accurate account of Comprova, my personal involvement may have impacted it. As an insider, I had access to the backstage of the coalition building and its daily work, being able to understand its trajectory, characters, and respective nuances, including personalities and relationships. At the same time, it is possible that journalists may have been shy about criticizing the project, despite being granted anonymity during the interview requests. Similarly, on the WhatsApp group, a forum that besides participating journalists also included First Draft team members and myself, those who potentially had misgivings about the project could have refrained from posting negative commentaries.

Working Routine

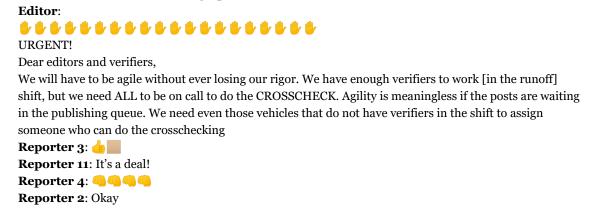
Shaped as a horizontal collaborative project based on consensus, to be effective Comprova relied on its full-time editor and two part-time assistant editors to work as conductors of a large and scattered orchestra. As such, they planned and coordinated editorial tasks for production and the crosschecking of verification reports, interacting with team members and setting the pace of the workflow, as shown in the following WhatsApp dialogue on the working shift for the election

¹⁰ Ribeiro, M., Ortellado, P. (2018). Fake news: What is it and How to deal with it. Available at: <u>https://sur.conectas.org/wp-content/uploads/2018/07/sur-27-ingles-marcio-moretto-ribeiro-pablo-ortellado.</u> <u>pdf</u>



runoff weekend (the following WhatsApp messages were originally written in Portuguese and have been translated):

10/05/18 - 4:35 - 4:45 PM – Assessing open verifications:



One of the editors' primary responsibilities was assigning verification tasks, taken by journalists based on their technical skills, newsgathering resources, such as access to sources, and availability. Once a claim was selected to be probed, a verification team was assigned. The next steps were the pitch assignment and respective tasks division. The job of verifying rumors in various formats as text, image, audio, video, and memes demanded different forensic skills acquired during First Draft training sessions. Besides digital tools, the work included two vital newsgathering steps: research and reaching sources to get as much evidence as possible.

08/08/18 - 10:49 - 11:02 AM – Probing an image:

Assistant editor 2: Folks from and the analysis of the subject School Without Party: anyone up to take a look? [image file to be probed attached to the message] **Reporter 12**: I can take a look when I get to the newsroom in the afternoon **Reporter 1**: I took a quick look with a forensic tool and it seems that at least the image is true. I'm here [if needed] **Reporter 12**: Great

08/09/18 12:21 - 12:23 PM – Getting evidence for a verification about photos of soy fields spelling the inscription "BOLSONARO 2019":¹¹

Reporter 6: I got an answer [a picture sent by the farm owner]
Reporter 12: Finally!!
Editor: Does he have a photo of them doing it? Or can he tell how they did it?
Reporter 6: The farm's name is wrong. I knew one could not trust the local blogs. I'm gonna ask.
Reporter 3: Can he send more photos?
Editor: And ask him to confirm if the video and the other photos are also from there. (...) If they are still

visible and are from last year we have to find a satellite photo that confirms this.

Reporter 6: I asked him more questions. When I have the answers, I'll post it here. I'm still not in the newsroom, but I'm going to put this new evidence in the docs when I get there. OKAY? **Editor**: This is it. Fantastic, folks.

¹¹ Investigated by journalists from O Povo, Folha de S. Paulo, O Estado de S. Paulo, and Gazeta Online, the photos taken from soy and corn fields of a farm owned by a Bolsonaro supporter in the state of Mato Grosso do Sul were found to be true. Available at: https://projetocomprova.com.br/post/re_2B5W8XYjrkmY



The daily journey started in the early morning, with the editors working in an improvised newsroom dubbed "de-bunker." Located in an underground space, it was lent by a journalism school based in São Paulo.¹² From there, they oversaw the work done in partnering newsrooms based in nine different Brazilian cities.¹³ Two early duties usually drove the project's daily routine: assessing the status of open verifications and finding new relevant claims to be verified.

10/01/18 - 8:27 - 8:40 AM - Assessing open verifications:

Editor: Good morning, Brazilian nation. We have two open verifications from last week. Can you update me on them?
Reporter 2: I am going to reach the PF [Federal Police] regarding one of the them
Reporter 13: Good morning! I'm going to update the information on the [Google] doc of the video in Israel shortly
Editor: Super.

06/10/18 – 9:58 – 10:11 AM – Social media monitoring:

Editor: We can split ourselves in the monitoring now:
1) Reporter 7 and Assistant editor 2 at ZenDesk
2) Someone at GAB
3) Someone at Instagram
4) [Someone at the] WhatsApp Monitor
Reporter 10: I can take the Whats monitor
Reporter 7:
Reporter 7:
Reporter 6: I'm here too, I can take this
Editor: Super, it's with you

The social media and messaging apps monitoring work was done in collaboration with two Comprova's institutional partners: the academic project Eleições sem Fake¹⁴ [Elections without Fake], and Torabit,¹⁵ a digital platform expert in tracking Brazil-related content in the main social networks. Zendesk, a customer service data platform, was used by the project to accept, organize, and respond to WhatsApp users' tips and questions.

Besides the WhatsApp group, team members also discussed internal issues, such as working shifts, interview requests, and new misinformation reports during weekly video calls held on Mondays.

Two main factors defined Comprova working shifts: first, the temporal patterns of misinformation production and viralization, both largely occurring in the afternoons; second, newsrooms working shifts, defined in turn by the news cycle, with peaks generally appearing in

¹⁴ A project based on automated scripts that identified 350 WhatsApp political public groups sharing falsehoods. Developed by the Department of Computation Sciences of the Federal University of Minas Gerais (UFMG) during the 2018 presidential election campaign. Available at: eleicoessemfake.dcc.ufmg.br

¹⁵ Available at torabit.com.br



¹² Provided by the Fundação Armando Álvares Penteado (FAAP), in the final phase of Comprova, the space was also used by a team of volunteer journalist students dedicated to giving feedback to Comprova users, and by an administrative assistant.

¹³ The 24 partnering newsrooms are located in Brasília, São Paulo, Rio de Janeiro, Vitória, Porto Alegre, Curitiba, Florianópolis, Recife, and Fortaleza. The project counted with newsrooms distributed in four of the five Brazilian geographic regions. Only the Northern region was not represented in the media consortium.
¹⁴ A project based on automated scripts that identified 350 WhatsApp political public groups sharing falsehoods.

the afternoons and evenings. Thus, most of Comprova's work was done in these periods of time, which meant long working hours for the in-house team.

I realized that most of the people who worked for Comprova worked from the late afternoon to the late evening, the shift with more verifications—more viralization too. It was when the Comprova team worked 100 percent. So I tried to do the job [for the newsroom] mainly in the morning and the stuff for Comprova in the late afternoon and evening.

Reporter 5

I didn't do Comprova at work. I did it during my free time. I arrived at the newsroom and if I was able to file something, if something occurred, I wanted to participate [in the project], even if it was just to share some information. I got interested in everything that was happening. So I didn't let it go. Even if I had to work in the early hours for Comprova.

Reporter 2

Comprova provided grants for 12 partnering newsrooms that requested financial support. But even journalists officially working full time for Comprova had to juggle the verification work with their newsrooms' increasing campaign coverage demands.

There was a grant and my newsroom assigned me exclusively for Comprova. A freelancer came to replace me during the project. Even so, it was impossible in some cases to be completely apart from our local obligations. But on 90 percent of the occasions I was paying exclusive attention to Comprova, to the monitoring and verifications. **Reporter 3**

Comprova had special shifts only for two weekends, in the first round and runoff—October 6, 7 and 27, 28, respectively. Incidentally, the editor regretted the lack of activity during the weekend following the knife attack against Bolsonaro on Friday, September 6, the eve of Brazil's Independence Day:

I think we were in a fragile situation. It should have been a decision for us to have an urgent shift, see who could do it. But our process, I think it is a bit slower for everything, even for the kind of decision we needed to take, because we couldn't simply summon people up.

Comprova editor

In order to strengthen Comprova's capacity for the runoff weekend, the project decided to join a task force in coordination with TSE and five other fact-checking services. Working together, they shared pitch assignments and republished partners' content on their own websites and social media platforms, using the hashtag #weverify [#verificamos]. The collaboration resulted in 50 published debunks.¹⁶

Is This Evidence at All?

Besides the published reports, the Comprova team also worked on another 50

http://www.tse.jus.br/imprensa/noticias-tse/2018/Outubro/parceria-entre-justica-eleitoral-e-agencias-de-checagem-de -fatos-evitou-disseminacao-de-noticias-falsas-no-segundo-turno-das-eleicoes



¹⁶ TSE (2018). Parceria entre Justiça Eleitoral e agências de checagem de fatos evitou disseminação de notícias falsas no 2º turno das eleições. Besides Comprova, the other task force members were Fato ou Fake (Group Glob) Agência Lupa, Aos Fatos, Boatos .org and E-farsas. Available at:

investigations—a weekly average of six claims—that members collectively agreed to drop because they lacked the project's factual evidence standards.

One was the case of a viral video in which a woman introduced herself as Kelsiane Gomes, claiming to be related to presidential candidate Ciro Gomes, adding that "all my family is [going to vote for] Bolsonaro." Republished by a pro-Bolsonaro Facebook Page, the video got a provocative comment: "And Ciro, it looks ugly, even your family is Bolsonaro."

On September 27, the journalist in charge of the investigation proposed dumping it, following feedback from the Ciro Gomes's campaign denying kinship between the candidate and the woman, but without offering any factual evidence.

Approved by his peers, the journalist's stance on abandoning the investigation was based on the following arguments:

- The Gomes's campaign could not offer factual evidence refuting the woman's claim. (That would require a genealogical tree supported by birth certificates of all individuals involved in the claim.)
- 2. Conversely, although her version seemed plausible, the woman probably would not be able to present hard evidence proving that she was related to Ciro Gomes.
- 3. Publishing a verification with an "Inconclusive" label would give oxygen to a rumor, which was against Comprova's editorial principles.
- 4. The claim was not relevant enough for public debate.

Still, a sense of frustration over the work required to investigate a claim that was ultimately abandoned was common among team members, as shown in this comment by a reporter:

I would love for it to work out for the time and effort I put into checking out these bizarre photos, but I'm not convinced of any debunk we can do there.

In this example, the journalist had examined 16 photos from a post about allegedly physically abused teachers to find that only one was bogus. Fourteen were true images of beaten Brazilian teachers, while the last authentic one was of a British teacher. The issue was relevant because the media had recently reported on a study published by the Organization for Economic Co-operation and Development (OECD) ranking Brazil first in terms of violence against teachers.¹⁷ Also, public school teachers were being accused by Bolsonaro's supporters of indoctrinating students with marxist ideology.¹⁸

https://www.theguardian.com/world/2018/oct/30/bolsonaro-win-students-urged-report-teachers-who-complain-whatsa pp



¹⁷ Tenente, L. & Fajardo, V. (Aug. 22, 2017). Brasil é #1 no ranking da violência contra professores: entend a os dados e o que se sabe sobre o tema. *G1* Available at:

https://g1.globo.com/educacao/noticia/brasil-e-1-no-ranking-da-violencia-contra-professores-entenda-os-dados-e-o-que-se-sabe-sobre-o-tema.ghtml

¹⁸ Phillips, D. (Oct. 30, 2018). Snitch on a teacher: Bolsonaro win sparks push against 'indoctrination'. *The Guardian*. Available at:

Is This Ready?

Comprova's high editorial standards resulted in no errors during the project. In order to achieve this, journalists had to navigate with the competing pressures of immediacy and accuracy. As the project went on, while team members and respective newsrooms seemed increasingly at ease with the collaborative effort, they shared a sense of urgency to publish debunks, fearing that viral rumors could distort public debate. Indeed, the interviews conducted with Comprova reporters and senior editors of partnering newsrooms reveal both their commitment to pursuing accuracy, and therefore to avoid mistakes, and the perceived need to verify claims in the shortest possible time span.

When we work mostly with digital media, we have a tendency to rush a lot to publish. We are concerned about scooping (...). Comprova has proved that rigor in newsgathering is as important, or even more important, than speed. We could not take the chance to make a mistake or leave something unfinished, or to publish something that could not be absolutely proven with documents, research, with the results [provided] by the tools we used.

Senior Editor 1

In our newsroom we are worried about the dissemination of false information. When some [false] information gained high scale, we produced some kind of denial explaining what was circulating, why that was not true.

Reporter 10

Not that we were slow in any way, I think we were very agile. We often did many verifications that ended on the same day or in a few hours, but always taking care to look, look again, analyze, check if there was something missing or not, and he [the editor] always caused a doubt in our heads, that anguish, to be sure you had in fact concluded that verification or not, if that debunk was done or not. (...)

While other [fact-checking] agencies published something with only an official rebuttal, we looked at the facts, [into] what had happened and into what was at the origin of it. I think speed and accuracy can go hand in hand, but not always. I think we have to moderate it a bit, so that we can also have the necessary accuracy that I think was the most important thing for Comprova in that election.

Reporter 2

The production of reports with solid evidence injected frequent postponements in the workflow, mostly related to intermediary steps of newsgathering (research of topics to be verified, reaching sources and getting their feedback). On the other hand, both the initial steps (pitch assignment and verification team formation) and the final ones (writing, editing, and crosschecking) were typically carried out in a matter of hours. The more complex the claim to be scrutinized, the longer the debunk.

The stakes for Comprova were never higher than in the investigation that took six days

in early October to verify a conspiracy theory that went viral, reaching more than 1.5 million views in just 24 hours. In a YouTube video, Hugo Cesar Hoeschl, who described himself as an expert in electoral statistics, doubted the integrity of the Brazilian electronic ballots system and promised to deliver an audit based on a mathematical equation known as Benford's law.¹⁹

A common theme in the campaign, alleged electronic ballots fraud, resulted in 15 debunks published by Comprova. The attempts to discredit the electoral system were largely produced by Jair Bolsonaro supporters, including Hoeschl, and shared by the candidate himself. Troubled about the constant attacks against its credibility, on the eve of the runoff the Superior Electoral Court (TSE), the federal body responsible for the electoral system, ordered the removal of an online video in which Bolsonaro attacked the electronic ballots.²⁰

While most of UGC questioning the electoral system was poorly conceived and delivered, to the Comprova team, Hoeschl's claim seemed more sophisticated and potentially convincing in the eyes of Brazilian voters. According to Hoeschl, there were "internationally recognized studies" indicating a 73.14 percent fraud probability in the 2014 presidential election won by Dilma Rousseff. On YouTube, he also promised to use Benford's law to audit the first-round results of the 2018 race to be held on Sunday, October 7. The scientific character of the fraud charges against the e-ballots and Hoeschl's audit pledge infused significant pressure on the Comprova team.

The Debunk Diaries:

A glimpse of the workflow of the investigation about the e-ballots fraud claim through the Comprova Verificadores WhatsApp group and the Google Docs draft post:²¹

Day 1 - Friday, October 5

10:05 a.m. - Comprova learns about Hoeschl's claim:

Senior editor 2: Good morning, folks! I got the following [from] two random groups. Have you seen this around?

THE ELECTRONIC BALLOTS Studies indicate that the fraud probability in the last Brazilian presidential elections was of 73.14% The risk is imminent, but there is something we can do in defense of Brazil. [includes a link to Hoeschl's video]

2:29 p.m. - The debunk starts:

²¹ A summary of conversations among Comprova team members on their WhatsApp group and the Google Doc draft post.



¹⁹ Lüdtke, S. (2018) Waves of disinformation in the Brazilian elections. *Medium*. Available at:

https://medium.com/1st-draft/waves-of-disinformation-in-the-brazilian-elections-7e4c4383323

²⁰ TSE (2018). TSE determina exclusão de vídeo em que Jair Bolsonaro critica urnas eletrônicas. Available at: http://www.tse.jus.br/imprensa/noticias-tse/2018/Outubro/tse-determina-exclusao-de-video-em-que-jair-bolsonaro-criti ca-urnas-eletronicas

Assistant editor 1: Folks, we opened the doc to check out this video about the ballot fraud. We received via whatsapp a link to the YouTube video that was posted yesterday and has already more than 400,000 views. Who is interested?

5:01 p.m. - The verification team is completed with journalists from four newsrooms—AFP Brazil, BandNews FM, Gazeta Online, and UOL.

5:30 p.m. - TSE issues a statement:

- Without naming Hoeschl, it refers to a video on the internet claiming "probability of fraud in the 2014 elections."
- Adds that there were not any records that the author of the video (Hoeschl) attended any events on audit and transparency held by TSE.
- Declares that the Brazilian e-ballots were already in use for 22 years without any effective evidence of fraud.
- Asserts that the result of the general elections of 2014 was independently audited as the initiative of a political party (PSBD), without any irregularities being identified.²²

6:03 p.m. - A Comprova team member comments on the TSE statement and the video social sharing:

We are having a hard time debunking the frauds. TSE sent a statement that does not refute all the claims made by the former prosecutor [Hoeschl] and I foresee no conclusion for a "misleading" or "false" [conclusion for the verification]. (...)

But the video of the guy on Youtube already has 675,000 views and is circulating on social networks. I wanted to open the discussion because I evaluate the debunk, two days before the election, as VERY IMPORTANT. The fact is that there is no evidence that his speech and methodology are true.

Reporter 2

6:10 p.m. - A Google Doc draft summarizes the debunk assignment divided into different tasks, to be carried out by journalists, including:

- 1. Who is Hugo Cesar Hoeschl?
- 2. Find studies backing the 73.14 percent chance of fraud in 2014
- 3. Explain Benford's law and how it is applied to the election
- 4. Who is behind Brasil Paralelo? (the website backing Hoeschl's claims)
- 5. Transcription of Hoeschl's video
- 6. Reach TSE
- 7. Reach Brazilian and international experts in statistics and e-ballots system about Benford's law and the Brazilian electoral system anti-fraud capacities

6:14 p.m. - A social media consultant working for Comprova promises to share with journalists referrals to leading statisticians and e-ballots security experts.

6:14 p.m. - Reporter 2 complains:

²² TSE (2018). Nota de esclarecimento: utilização das urnas eletrônicas nas eleições de 2014. Available at: http://www.tse.jus.br/imprensa/noticias-tse/2018/Outubro/nota-de-esclarecimento-utilizacao-das-urnas-eletronicas-na s-eleicoes-de-2014



I do not know the subject in depth and I do not feel I have elements to tell if it [the fraud claim] is or is not [true]. Lost 😞

Day 2 - Saturday, October 6

9:46-9:56 a.m. - "Can we deliver it today?":

2:33–3:38 p.m. - The debunk gets some traction, as a journalist reaches a political scientist, the first of six experts in e-ballots and electoral statistics interviewed by Comprova for the investigation.²³ This positive step lifts the team's mood:

Reporter 3: [I'm] in touch with [Guilherme] Russo!! He already saw the video I sent and now is going to read Hoeschl's study. Then he will say whether he can or cannot contribute. We are exchanging emails. **Editor:** super **Reporter 6:** uhuu! you nailed it **Reporter 2:** $\sqrt[4]{4}$

Although heading in the right direction, they are still distant from delivering a solid and conclusive report, according to the post draft assignment. And the pressure is mounting, as Comprova is getting hundreds of verification requests on e-ballot fraud claims through its WhatsApp public account.

5:20 p.m. - Fato ou Fake [Fact or Fake], a fact-checking service owned by the Globo Group publishes a post about Hoeschl's video and other e-ballot fraud UGC claims, labeling them as fake. In the first version of the post, the main evidence presented by Fato ou Fake against Hoeschl's claim is the TSE statement.²⁴

9:15-10:24 p.m. - "Can we deliver it by Monday?":

https://oglobo.globo.com/fato-ou-fake/mensagens-com-conteudo-fake-sobre-fraude-em-urnas-eletronicas-se-espalham-nas-redes-23134205



²³ Verifiers interviewed the following researchers: Diego F. Aranha, Ph.D. in computer science from the University of Campinas (Unicamp) and assistant professor of computer security and cryptographic engineering at Aarhus University (Denmark); Maurício Soares Bugarin, Ph.D. in economics from the University of Illinois at

Urbana-Champaign and professor and head of the Economics and Politics Research Group at the University of Brasilia (UnB); Mario Gazziro, Ph.D. in computational physics by Universidade de São Paulo (USP) and professor at the Federal University of ABC (UFABC); Guilherme Russo, Ph.D. in political science from Vanderbilt University and post-doctoral researcher at the Center of Politics and Economics of the Public Sector at the Getúlio Vargas Foundation (FGV-CEPESP); Fábio Júlio da Silva Valentim, Ph.D. in mathematics from the Institute for Pure and Applied Mathematics (IMPA) and adjunct professor at the Federal University of Espírito Santo (UFES); and Sergio Wechsler, Ph.D. in statistics from the University of California at Berkeley and professor at the Institute of Mathematics and Statistics at São Paulo University (IME/USP).

²⁴ Mota, M., Couto, M. & Rocha, G. (2018). Mensagens com conteúdo #FAKE sobre fraude em urnas eletrônicas se espalham nas redes. The report was initially published at 5.20 pm on 10/06/2018, to be updated at 5pm on 10/10/2018 "to include other information." The final version presents evidence related to the Benford's law. *O Globo*. Available at:

Editor: Do we manage to finish it [by] Monday? Even if there is no runoff, the guy [Hoeschl] plans to release [his audit] next week

Abraji president: I find this debunk particularly important.

Reporter 3: I think so. Maybe before, depending on tomorrow's follow-ups. The ICMC [Institute of Mathematics Sciences and Computation] is working to provide a source to Reporter 4. Another two ~big math guys~ PhD experts I reached promised to take a look at the documents today. I think that with any of the three, with Guilherme Russo, with the studies that Media consultant linked, we can do a reasonable job. **Editor**: Very good, folks

Reporter 4: I'm also trying [to reach] a professor at UnB [University of Brasília]

Day 3 - Sunday, October 7 (Election day)

7:54-8 a.m. - "Let's make an effort to deliver it this morning":

Editor: Reporter 2, the investigation is already consistent, but I would like to know if you need extra help to work in any front

Reporter 2: The big question, in my view, is that we are laymen on the subject. But the elements we have gathered so far make us realize that it is a guy [Hoeschl] who made a single study on the theme [e-ballot fraud] about the 2014 election, which is just about probability, uses a methodology many [experts] have never heard of, who is anti- PT [Labor Party], with links to the right, a former prosecutor who has suffered disciplinary proceedings and promises to do some sort of 'auditing' of today's result until [October] 11th. I may even have forgotten something. In my assessment, and I don't know whether [our] colleagues agree, it [his claim] is unproven. It's very complex.

Editor: Let's make an effort to publish in the morning then, with what we have. There is great expectation for this debunk.

9:16–9:22 a.m. - Experts say Benford's law is not applicable to elections:

Abraji president: Folks, according to this study (...) Benford's law cannot be applied to do a diagnosis on election fraud

Reporter 4: That's what Mario Gazziro, author of another analysis I got, commented on. He is [a] professor at the UFABC and a post-doc fellow at ICMC-USP. Pasted his analysis on the docs.

12:13-12:35 p.m. - The debunk post gets a first draft:

Reporter 3: I'll call Hoeschl on the phone number you left there.
Editor: Good
Reporter 4: I'm starting my working shift. Shall we prioritize the e-ballot video?
Abraji president: please!
Reporter 3: And Hugo Hoeschl knows Comprova. He agreed to answer questions in writing
Reporter 6:
Reporter 1: Folks, on the e-ballot debunk. Anybody working now? I'm going to start writing the post and

we are adding the verification info and checking what is yet to be verified and what we have already done, okay?

4:56–5:03 p.m. - Waiting for feedback from sources:

Editor: Dear all, the ballot debunk has not progressed, right? **Reporter 3**: I'm asking the guy of the fraud operation. I started to draft the final text, but some of his answers are fundamental.

Day 4 - Monday, October 8

1:42–1:43 p.m. - Still waiting for feedback from sources:

Reporter 2: My source at TSE is off. I'm going to try another one (...) Managed to talk. Waiting for answer. They know already

4:13-4:17 p.m. - Looking for the Organization of American States (OAS) input:

Assistant editor 2: Reporter 2, Reporter 3, Reporter 4 and Reporter 1, I sent you an email for us to address the verification on Hoeschl's project. (...) The comment thread in the docs is already very chaotic. Reporter 2: I'm off Assistant editor 2: The OAS will provide us the ballard. Explain in the email. Reporter 2: OAS? Reporter 2: 😳 🙄 Assistant editor 2: Yes.

Day 5 - Tuesday, October 9

2:39-5:02 p.m. - Reaching the OAS:

Reporter 1: I have worked for the OAS, if you think it can facilitate, I can search for a contact there. **Reporter 4**: Reporter 1, as for the Anti-fraud debunk, I'm waiting for the feedback from the OAs and UnB [University of Brasília]

Reporter 1: Folks, I'm working on the OAS contact. I'll keep you posted. **Editor**: Can we deliver this one until tomorrow?

Day 6 - Wednesday, October 10

```
8:46–9:28 a.m. - "It has to be today":
```

Editor: Our priority today is to publish the debunk of the video on the anti-fraud operation of e-ballots. (...) I emailed you about the verification of the video by Benford's law guy. Shall we begin to write the final post? **Assistant editor 2**: Ideally, we publish it today, prior to the noise that they want to [make] publishing [their audit] tomorrow.

Editor: It has to be today

12:11–3:09 p.m. "The post is essentially ready":

Assistant editor: Folks, the post is essentially ready. We need one more quotation from another expert that you have heard, as I understand it, and one or two paragraphs about the connection of the [anti-fraud] project with Bolsonaro supporters. At the end you can enter something that Hoeschl has spoken to you. **Editor:** Reporter 2, Reporter 4, Reporter 3, and Reporter 1 I need you to take a look into the final draft of the Hoeschl's video verification [to see] if the suggestions made by Assistant editor 2 will be taken or not. Following this, can I consider it closed?

4:13-5:23 p.m. - "Crosschecking available by 7 p.m.":

The super hiper video on the ballots fraud - we are going to publish [it] today and I guess will be available for crosschecking by 7pm. Get ready for this, please.

Abraji president: Great job, folks. It's one of Comprova's most important verifications. Applause for all.

6:31-8:21 p.m. - Crosschecking final tweaks and publication

Reporter 12: In the label "Lacking evidence" there is a "of" missing in "possibility fraud." And there are two paragraphs totally glued.

Reporter 3: I suggest an inversion in the [order of] labels:

MISLEADING

Benford's law, a mathematical concept in which the video is based, is not considered consistent in the academic literature to indicate whether an election was frauded.

LACKING EVIDENCE

Experts and studies consulted by Comprova attest that mathematical law, by itself, is not capable of proving irregularities.

Editor: Let me ask you all to see how it looks now for me to publish it. Reporter 12: I think it's okay now Editor: Can I publish it as it is? **Reporter 7**: Just a small remark Editor: Tell me **Reporter 7:** YouTube, the Tube is capitalized. It reads Youtube (...) "State of Arizona v. Wayne James Nelson (CV92-18841)" wouldn't be better to translate it? Editor: corrected. accepted. **Reporter 7**: another thing, laughs Editor: tell me Reporter 7: Hoeschl or Hoeschel? It reads both Editor: The first one Reporter 12: I found 3 with e **Reporter 7:** 4^o, 5^o paragraph Editor: Corrected all **Reporter 7**: That's it, laughs. I hope Editor: Published!!!! Congrats folks. Great verification. Reporter 12: Editor: Folks, we are going to publish this post in the networks Reporter 7: 👍 🡍 👍 🦕 Abraji president: Dear all, in the print edition of we added one line to the lead to bring the case to 2018: "It is misleading the content of a video seen over 2 million times on social networks over alleged fraud in the 2014 election discovered thanks to the application of Benford's law - a statistical rule - to official

results. Those responsible for the video have announced that they will apply the same methodology to detect alleged fraud in this year's election."

Editor: I think it improves our post and we could replicate it here. [Suggestion accepted by partnering newsrooms]

Crosschecked by 11 partnering newsrooms²⁵ and published at 7:54 p.m., the debunk²⁶ denies Hoeschl's fraud claim, also addressing the following topics:

In the post lead:

²⁶ Available at: https://projetocomprova.com.br/post/re_2B5W8XZQGoGN



²⁵ The following vehicles crosschecked the post: revista piauí, Poder 360, Gaúcha ZH, Veja, Folha de S. Paulo,

Gazeta do Povo, NSC, Jornal do Commercio, SBT, UOL, and O Povo.

- 1. The OAS discards the application of Benford's law to audit elections.
- 2. There is extensive academic literature questioning the Benford's law applicability to detect electoral frauds.
- 3. Hoeschl says that there are "internationally recognized studies" indicating a 73.14 percent fraud probability in the 2014 elections. Comprova has not found any independent academic study mentioning this number. The percentage appears in a 11-page "technical report" co-written by Hoeschl himself.
- 4. Hoeschl also claims that the Brazilian e-ballots "are not auditable." This information is not correct. The 2014 election results were audited by the PSDB, the party of presidential candidate Aécio Neves, defeated by Dilma Rousseff.
- 5. The Brazilian e-ballots have been in use for 22 years. Although the electronic voting system has been questioned, there is no proven fraud.

In the post backgrounder:

- 1. What is Benford's law and its applications?
 - Discovered by physicist Frank Benford, the law is an observation about the frequency distribution of leading digits generated in a "natural" manner (without arbitrary human choice). It has been used to signal accounting frauds.
- 2. Does Benford's law work for elections?
 - Academic studies, experts interviewed by Comprova, the OAS, and the Carter Center, an American NGO that monitors elections globally, have expressed skepticism toward the application of Benford's law for electoral purposes.
- 3. Is Hoeschl's study a novelty in Brazil?
 - Other experts, including Guilherme Russo, applied mathematical models to the results of the 2014 election and came to conclusions contrary to Hugo Hoeschl's. Therefore, there is no evidence of fraud in the 2014 election.
- 4. Who is Hugo Hoeschl and who sponsors him?
 - A former attorney of the Finance Ministry, he suffered disciplinary proceedings from the Federal Attorney General's Office for the sale of software to the Ministry of Social Security.
 - The first public presentation of his electoral fraud claim was held in a 2015 event promoted by anti-PT (Labor Party) militants. A second event with the same agenda was held in 2016 at the National Congress and was attended by then-federal representative Jair Bolsonaro.
 - In 2015, Hugo Hoeschl went to Oslo, Norway, to challenge former President Lula's nomination for the Nobel Peace Prize, saying that Lula did not deserve the award.
 - The video about the alleged fraud was published three days before the first round of 2018 elections on the Facebook Page and YouTube channel of Brasil Paralelo, a company that produces documentaries on topics "that have been concealed for decades."
 - Interviewed by Comprova, Hoeschl acknowledged that the application of Benford's law in the analysis of electoral results "is not absolute."

- Asked if he knew other studies indicating 73 percent of electoral fraud in 2014, Hoeschl referred to a study done by researcher Walter Mebane, known for applying Benford's law in other countries, adding that he was not aware of other documents with similar results.
- Hoeschl also clarified that the data he used in 2014 and plans to use again in the 2018 elections is public. In the video, he talks about "capturing, processing, and analyzing the database" of TSE.

On October 16, Hoeschl published another YouTube video claiming that his "operation anti-fraud" detected a 77.68 percentage fraud probability in the election's first round results.²⁷

According to the Comprova editor, the debunk of Hoeschl's claim defused the conspiracy theory against the Brazilian electoral system:

We always tried to be strict, to seek rigor in newsgathering, to be irrefutable (...). There was already the construction of a narrative to challenge [the election's] whole result if the outcome was different from what it was [Bolsonaro's victory] and we managed to throw water in that fire. [The election fraud conspiracy] is a theme that became irrelevant later and I'm sure it was the result of Comprova. [Hoeschl's first video] was maybe the biggest viralization we saw, a giant wave that we turned into a ripple. I'm sure it was the job done by Comprova, that took some days, we did not do it fast. (...) It demanded this amount of time to be delivered.

False or Misleading?

Crucial to the mission of debunking misinformation, a debate on how to classify a claim into different trustworthiness categories (e.g., "True," "False," "Misleading," etc.) took place in late September, three weeks before the first round of the election. The case in point was a Facebook post about a campaign motorcade in the southern state of Rio Grande do Sul that allegedly included three trucks owned by the Brazilian Army. The convoy was led by Lieutenant Colonel Zucco, an ally of presidential candidate Jair Bolsonaro (PSL) and candidate to the state assembly. If true, it would mean that Brazilian Army equipment was being appropriated by a political candidate, a clear breach of the electoral law.

The verification done by journalists from media partners Gaúcha ZH, Poder 360, and AFP Brazil began in the late morning of September 24. As the reporters started investigating the story, they found that the trucks, whose doors still carried an old version of the Army's coat of arms, were originally owned by the military in the 1980s. The vehicles had been later auctioned to third parties and recently resold to a tourism company whose owner was a friend of Zucco's. According to the Army, since the trucks were private property at the time of the campaign, there was no illegality in their usage in the motorcade.

Following six hours of work, the verification seemed to be concluded and a draft post detailing the story was ready to be reviewed by the Comprova editor. On the WhatsApp group, he

²⁷ Hoeschl's second video does not mention Comprova and refers to the Federal Court of Accounts (TCU), a body whose expertise is to detect accounting frauds, supporting Benford's law for electoral applications. As of March 2018, the video reached over 470,000 views.



informed the team that considering the fact that the trucks had once belonged to the Army, he had replaced the post's verification label "False" to "Misleading." He also requested that the journalists involved in the investigation go back to the draft post to check that he had not "altered the meaning of anything." Once he had an okay from the journalists, the post was shared with the wider group to be crosschecked. At that point, the headline read: "Army trucks" used in motorcade pro-Bolsonaro belong to a tourism company.

Asked to check the post, a journalist not involved in the investigation expressed discomfort about the phrase "Army trucks," even in quotation marks, asking for a more direct and fact-based headline. Another journalist not involved in the investigation quickly suggested a new headline: Trucks in a pro-Bolsonaro motorcade belong to a tourism company, not the Army.

Both the second version of the headline and the report were then crosschecked by 12 partners and published on the Comprova website.²⁸

But the underlying issue of the motivation behind a claim that distinguishes a false proposition from a misleading one still intrigued team members. The same journalist who had been opposed to the first version of the headline asked about the difference between the two categories. Minutes later, the editor answered: "False is tacit and deliberate. Misleading is not necessarily deliberate."

He took the example of the trucks: "It was false [information], but considering that the trucks were owned by the Army at some point and still carried some inscription, I replaced [the label] to misleading." The editor also asked if the journalists understood what he meant.

"Yes! [I] explained I understood and I agree with the criteria!!," answered the original journalist who had raised the question. A second journalist jumped into the conversation: "I was also doubtful about misleading and false, but now I understand [it] correctly (...) and I agree." The editor then promised to spend some time preparing a list of the different categories, which he did, publishing it on the WhatsApp group in the next morning.

b b b b COMPROVERS !!!

FOLLOWING OUR NIGHT-TIME CONVERSATIONS I DECIDED TO MAKE A DESCRIPTION OF THE CRITERIA FOR THE LABELS WE ARE USING. THESE CRITERIA ARE DESCRIBED IN THE DOCS SO YOU CAN ALREADY SUGGEST THE LABELS AS YOU WRITE THE FINAL TEXT. I WILL ALSO SHARE [IT] HERE:

Digitally altered: for audio and / or image content that has undergone modifications to change the original meaning.

False: Content released deliberately to spread a lie. Harmful.

Wrong context: Content taken from the original context and used in another for the purpose of changing its original meaning.

Veja. Available at: https://projetocomprova.com.br/post/re_2B5W8XN3KkrN



²⁸ Projeto Comprova (2018) Caminhões em carreata pró Bolsonaro pertencem a empresa de turismo, e não ao Exército. The following partners cross checked this verification: Gazeta do Povo, Band, SBT, Jornal do Commercio, NSC, Folha de S. Paulo, Gaúcha ZH, Gazeta Online, piauí, Poder 360, O Povo and

Misleading: Content that induces a different interpretation of the intention of its author; content that confuses or is disclosed to confuse, with or without the deliberate intention to cause harm.

Satire: humor content, caricature.

Genuine image: original image (photo, video, illustration) that corresponds to reality, true, published without editing.

Verified location: Content captured at the location where it is said to be generated.

Proven evidence: Veracity confirmed without any doubt.

Legitimate event: Confirmed fact or event

Out of the total of 147 published posts, 135 claims were found to be false or misleading, while 9 were found to be true. Another two posts were brackgrounders about the project.

Effect of Comprova on Participating Journalists

According to all 16 journalists interviewed for this research, the experience of working with Comprova was largely positive, with perceived short- and long-term benefits in verification skills learning, professional morale boost, and editorial standards improvement. As in the French project CrossCheck, Brazilian Comprova members also indicated their mutual accountability as a key element in achieving the zero errors goal at the end of the project:²⁹

I think [Compova] has improved the work of everybody. We were striving to be the most accurate possible, as true as possible. (...) Because we always had the goal to say [to news users]: Look, this is true; but that is a lie. (...) It was something wonderful, I can say today that I was part of something historical.

Reporter 2

The main apprenticeship is the experience of [editorial] processes, tools, and approaches. It was something I absorbed and can continue to absorb for my newsroom.

Reporter 3

The collaborative effort also had the effect of building trust and personal relationships between journalists of normally competitive newsrooms.

I gained experience, gained colleagues. People I admire, who now know my name. I already knew [their bylines] and now I know them personally, even if remotely. They have enriched me in terms of training and journalistic knowledge.

Reporter 9

I used to say that a journalist's biggest asset was their phone book, because the more important people you had there, the more exclusive information you got—backstage, that sort of thing. Comprova has shown that working together is extremely rich. (...) I think we've done a great job. We have shown that it is possible to

https://medium.com/1st-draft/in-an-age-of-misinformation-sustainable-newsroom-collaborations-should-become-a-pri ority-6c1921b599a8



²⁹ Wardle, C. (2018) In an age of misinformation, sustainable newsroom collaborations should become a priority. *Medium*. Available at:

collaborate. Newsrooms do not necessarily always have to be competitors. They can work together for a greater purpose.

Reporter 7

What do I get from Comprova? A certain sense that you can do different things with different people working together. I think the most relevant was the sense that this type of project can work. Senior editor 5

Reporters showed a strong sense of appreciation for the external validation provided by their bosses and newsroom peers for their work on Comprova. Some mentioned becoming a source of consultation for forensic tools and fact-checking standards at their newsrooms, also participating in live broadcast presentations about the project. Additionally, participating journalists reported invitations to speak in public events on misinformation held by academic institutions and the TSE.

However, the daily effort of verifying UGC took a physical and emotional toll. Since the beginning of the project, journalists voiced their concerns about the risks involved in probing problematic political content: from committing verification errors that could potentially ensnare the entire coalition's reputation, to becoming the target of attacks, including physical aggression, hate speech, and leaks of personal data.

I think we cannot go wrong. I think there are risks. I think there is a risk of making a mistake, like not having the right source, to be deceived in some way. (...) And there is also the concern that verifiers themselves become victims of disinformation campaigns.

Senior editor 3

I've already blocked all my social networks to the private mode to prevent this [attacks] from happening, but I still have a certain fear.

Reporter 5

When you deal with the underworld, you expose yourself. It is challenging because of that. It's a new way for you to work. It's the reverse of what you learned in college. But I think it's probably one of the most promising forms of journalism.

Senior editor 4

Although the work done by Comprova received criticism, the feared attacks never materialized. The physical and emotional toll of debunking falsehoods did, however, impact team members, who complained of the stress caused by the high volume of rumors circulating on the internet combined with the complex nature of claims to be investigated. The long working shifts also penalized journalists, as shown in this conversation held in early October in the WhatsApp group:

Reporter 1: Folks, yesterday, when I came back from the newsroom at dawn, I had a sciatic nerve clamp. probably because I sat for many hours. now, any [body] position that is not lying down is impossible. I'm going to stay in bed for a few days because I can't even sit in bed to use the laptop.
Reporter 2: Get well, Reporter 1
Reporter 10: get well!!
Reporter 7: Get well Reporter 1



Another source of annoyance for journalists was the pattern of misinformation distribution, compared to waves by the Comprova editor: after flooding an environment, the same rumors recoiled to return later with force, to reach different spaces and people.³⁰ As noted by a team member:

I had a certain sense of frustration when we produced a debunk and two weeks later the same rumor was circulating again. It gave a feeling of, "gosh, we have worked and are showing here that this is wrong. But the public does not understand why it is a lie."

Reporter 10

A journalist complained of the emotional strain caused by angry and/or malicious remarks about Comprova's work published on the comment boxes of partnering vehicles' websites. Among the 13 reporters heard in the second wave of interviews, he was the only one who did not wish to participate in future collaborative verification projects.

Even without any errors, with all this negative mood, this dissatisfaction manifested by some people increases the exhaustion of coverage like this. I leave this work, these months of Comprova, a bit worn, physically and psychologically.

Reporter 4

But overall, team members expressed joy and professional pride for being part of the project, as shown in these WhatsApp conversations held in the final days of their 2018 collaborative effort:

10/28/18 - 4:09 pm

Editor: 🗬 🗬 🗬 🗬 🗬 🗬 🗬 🗬 🗬

Comprovers, Debunkillers,

I think we can consider this phase closed. (...) I would like to thank you very much, a determined team, with a spirit of collaboration such as I had never seen, that always sought to find the truth of the facts, which abstained from manifesting itself politically in such a sensitive moment of the Brazilian life to guarantee the project's credibility, and did not generate a single conflict in more than three months of work. It was a great pleasure working with you all. Thank you so much for everything.

10/30/18 - 3:25 - 3:36 pm

Reporter 1: Folks, I'm already missing you :-/

Reporter 12: miss you too 🎔

Reporter 6: I'm a bit sad to go back to the standard job after months [of] experiencing this incredible format of working

Reporter 10: Needed the contact of some PR agency today. Instead of asking a newspaper colleague, I asked Reporter 7

Reporter 2: Collaborative guy, as always 😁 😁 😁

10/29/18 - 8:49 am

Abraji president: Dear comprovers, more than once I was moved by the examples of good journalism that you gave here. I can speak for Abraji: we are proud of the work and VERY grateful

³⁰ Lüdtke, S. op. cit.



for the dedication. You understood the size of the challenge, embraced the cause, and did not weaken at the size of the challenge and the complexity of the problem. In a scenario of so much bad stuff happening, Comprova stands out as something great. You can be proud, this is a milestone in Brazilian journalism. This is a collective work and everyone is to be congratulated.

Effect of Comprova on Participating Newsrooms

Similar to the positive perception participating reporters had about the effect of Comprova on their own careers, the accounts of five senior editors heard in the two waves of interviews also revealed the project's beneficial impact on their newsrooms—particularly in terms of editorial standards improvement, such as verification skills learning and the adoption of newsgathering protocols to produce indisputable debunks. The same kinds of gains were mentioned by the deputy newsroom director interviewed at the beginning of the project. Senior journalists also expressed the willingness of their news outlets to launch or expand existing verification products.

I think Comprova raises the verification standards of everyone; it requires rigor. Because it would be very bad for the project if it were to be questioned (...) Comprova has shield itself of all guarantees and possible care. This raises the fact-checking bar. And I think this will end up being replicated within the newsrooms. **Deputy director 1**

[Comprova's] greatest impact is the apprenticeship of tools and the perception of the importance of this type of specific verification. (...) Actually, it helped to reinforce the perception I already had that it is possible to seek objectivity in newsgathering under certain parameters.

Senior editor 5

When you verify misinformation, that takes you on a route to always want to check more. So I think even in our own production at we will have a legacy of Comprova in this area of fact-checking. **Senior editor 2**

With regard to their organizations' credibility, senior journalists and reporters shared the view that Comprova was valuable in strengthening their collective journalistic output. Indeed, some interviewees saw their effort as a response to the constant barrage coming from politicians, campaigners, and UGC aimed to equate the Brazilian press to "f.. news."³¹

Again, as in the CrossCheck project,³² what seems to have initially enabled the collaborative effort at Comprova was a sense of interdependency between the media, which then translated into a sense of responsibility, with the goal of restoring audience trust and journalists' role as gatekeepers during the most divisive Brazilian presidential campaign since the end of the military rule in the 1980s.

https://www.google.com.br/search?source=hp&ei=IIGfXPDsFoq55OUPz4WWkAE&q=imprensa+brasileira+produz+n ot%C3%ADcias+falsas+em+2018&btnK=Pesquisa+Google&oq=imprensa+brasileira+produz+not%C3%ADcias+falsa s+em+2018&gs_l=psy-ab.3...2329.2329...3464...0.0...0.124.215.1j1.....0....2j1..gws-wiz.....0.d2kjxRbEDjU ³² Smyrnaios, N., Chauveau, S. & Marty, E. *Op. cit.*



³¹ A Google search with the words "imprensa brasileira produz notícias falsas em 2018" [Brazilian press produces f.. news in 2018] brings approximately 240,000 results. Available at:

There is an avalanche of false information. And at the same time the traditional press is under attack. It's a very strong wave against the press and I think that having several vehicles partnering with Comprova gives us a bit more security. (...) Our responsibility only increases because this misinformation reach such a level that it threatens our own democracy.

Deputy director 1

Journalism is used to competing, not collaborating. (...) But everyone for itself further debilitates us. I think the traditional press in general is being at various times even ridiculed by political groups, by people who know to discredit the press. They win with misinformation. So this tactic presupposes a different type of reaction. We cannot win this individually.

Senior editor 1

The publication of logos from Brazilian partnering newsrooms on crosschecked verifications they helped to debunk was also perceived by a Brazilian reporter as a means to enhance brands' visibility and credibility.

Comprova brings credibility to the vehicles. (...) Those participating can add value to their brands. The audience becomes more confident about the content of that newspaper. **Reporter 5**

Consequently, senior journalists indicated their willingness to take Comprova beyond the presidential race, turning it into a continuous effort, dubbed Comprova 2.0, an initiative also supported by the Abraji president.

It would be a major waste if all this built network, all this added knowledge, this experience and incredible partnership got lost. (...) This is the best that digital [journalism] has to offer. **Senior editor 1**

I think **I** is open to integrate itself to other newsrooms to resume a partnership like this one of Comprova in the future. (...) We need to have this collaboration, this exchange of information from the journalistic point of view, for the richness of the work that evidently gives a greater weight to what is reported. **Senior editor 2**

I see a possible continuation. This will obviously depend on the interest of the partners and the existence of [financial] resources. But I see a need to maintain Comprova because the misinformation about public policies, about acts of government, will continue. The very experience of the United States shows that misinformation does not happen only during the campaign.

Abraji president

Who did Comprova reach, and what impact did it have on its audience?

Guilherme Conter, MSc in Marketing Strategy and Consumer Behaviour at Federal University of Parana and Nic Dias, Shorenstein Center for Media, Politics and Public Policy, Harvard Kennedy School



The deluge of misinformation that circulated daily during the 2018 Brazilian election campaign made it critical for Comprova to share its debunks swiftly and effectively. Complicating matters was the fact that the 2018 elections had 13 presidential candidates, the largest since 22 candidates in 1989. Such a divided electoral landscape meant that the audience for Comprova's debunks could be fragmented across different voting populations.

Although Comprova debunks were faithfully shared by its coalition, the reach of these posts was limited by the size of each partner's audience. The Comprova team expected its Facebook and Twitter followers to grow naturally until the end of the election. However, we realized that relying on broadcasts to followers could limit the audience for debunks—not only in terms of size, but demographics and political views as well.

Previous research from the United States has shown that conservatives tend to hold less favorable views of standalone fact-checkers than progressives, especially when comparing politically knowledgeable individuals in both camps.³³ Likewise, Audience Insights data for Comprova's Facebook Page showed that most followers identified as left wing, following the Pages of politicians such as Manuela D'Ávila and Fernando Haddad, and political parties such as PSOL 50 and Partido dos Trabalhadores.

During the project planning phase, the power of promoted posts and ads was discussed with the technology companies, and we were donated Facebook ad credits and Twitter for Good credits from both companies. With these ad credits from Facebook and Twitter, Comprova used ads on the two platforms to reach a wider and more diverse audience. Ads allowed us to target wide swathes of citizens likely to have an interest in politics. By the end of the project, for example, sponsored Facebook posts reached almost seven million people, compared to the roughly 136,000 organic followers of Comprova's Page.

Facebook

Comprova's Facebook audience-targeting focused on two main groups, both of which were based on interests related to declared candidates and relevant news outlets.³⁴ We initially targeted Brazilian residents over the age of 13 who identified interests in one or more of the main electoral candidates.³⁵ A second audience group targeted users with interests in at least one

http://www.americanpressinstitute.org/wp-content/uploads/2015/04/Estimating-Fact-Checkings-Effect.pdf Rasmussen Reports, 2016, *Voters Don't Trust Media Fact Checking* http://www.rasmussenreports.com/public_content/politics/general_politics/september_2016/voters_don_t_ trust_media_fact_checking

³⁵ Ciro Gomes, Deputado Cabo Daciolo, Fernando Haddad, Geraldo Alckmin, Guilherme Boulos, Henrique Meirelles, Jair Bolsonaro, João Amoêdo, Luiz Inácio Lula da Silva, Manuela D'Ávila, and Marina Silva. Former President Luiz Inácio Lula da Silva was also included in this list since his candidacy was disputed until August 3, when the Superior Electoral Court (TSE) decided he was not eligible to run and Fernando Haddad took his place.



³³ Nyhan, B. and Riefler, J. (2015) *Estimating Fact-checking's Effects Evidence from a long-term experiment during campaign 2014*, American Press Institute

³⁴ Facebook Interests refer to what target audience members have included in their profiles, as well as which pages and groups they've liked, followed, or engaged with.

of Comprova's coalition members, as well as additional pages that were actively covering the elections and had a high number of interested Facebook users.³⁶ A third audience group targeted interests in "elections" and "presidential elections," but this was less effective and more expensive than the other ad groups, and therefore was discarded.

Ad campaign groups

Five groups of ad campaigns were created, each with a distinct objective:

- 1. increase **traffic** to Comprova's website, to allow people to read debunks in entirety;
- 2. increase the number of **followers** on Comprova's Facebook Page;
- 3. drive user **engagement** for promoted posts;
- 4. encourage users to send rumors to Comprova via WhatsApp for investigation; and
- 5. promote **video views**.

The ad campaigns generated 447,728 link clicks, 111,213 Page likes, 2,380,121 post engagements, ³⁷ and 475,109 video views of at least 10 seconds. From August 6 to October 31, the campaigns collectively reached nearly 6.9 million people and appeared on screens more than 24.5 million times. More than 3.5 million people (52 percent of the total) were reached from October 3 to 7 alone due to an increase in ad spending, and increased interest in the lead-up to the first election.³⁸

Demographics

The audience for Comprova's ads was 53 percent women, which is consistent with the official numbers of registered voters from Brazil's Superior Electoral Court (TSE).³⁹ However, 61 percent of post engagements came from women, particularly over the age of 45 (almost 38 percent). Women over 45 also accounted for almost 43 percent of all ad link clicks. Since women over 45 account for 23 percent of all registered voters in Brazil, this is a relevant segment of the voting population (although voting isn't mandatory for people 70 and older). If not for our campaign encouraging users to send Comprova rumors via WhatsApp—where men accounted for 59 percent of views and link clicks—these figures may have been even more skewed toward women.

The gender imbalance reflected in Comprova's ad engagements was also present in Comprova's organic followers: as of April 2019, Comprova's Facebook followers consisted of 64 percent women, of which 70 percent had a college education. These followers apparently leaned left, as

http://www.tse.jus.br/eleitor/estatisticas-de-eleitorado/estatistica-do-eleitorado-por-sexo-e-faixa-etaria



 ³⁶ Folha de S. Paulo, Antagonist, CartaCapital, Veja (magazine), Jornal Nacional, Correio do Povo, UOL Notícias, El País, ISTOÉ, Época, Exame (magazine), O Estado de S. Paulo, Breaking the Taboo, Futura (TV channel), Revista Fórum, InfoMoney, O POVO Online, Brasil 247, Jornal do Commercio, Café com Jornal (Band), or The Intercept.
 ³⁷ Engagements include reactions, comments, link clicks, and video views.

³⁸ These numbers have important caveats. First, the total number does not include organic, non-paid numbers. Second, the number is estimated from sampled data and thus not exact. Third, paid and organic numbers can't be combined, as it would duplicate people reached by both types of posts. (This also applies to post statistics.)

³⁹ TSE - Estatísticas do eleitorado – Por sexo e faixa etária. Available at:

they followed the pages of politicians such as Eduardo Suplicy, Manuela D'Ávila, Jandira Feghali, and Fernando Haddad. These followers also liked political parties such as PSOL 50 and the PT: Partido dos Trabalhadores.

The left-leaning tendency among followers and those engaged with Comprova ads underscored the importance of pushing Comprova's content to a wider, more balanced audience through the use of sponsored posts.

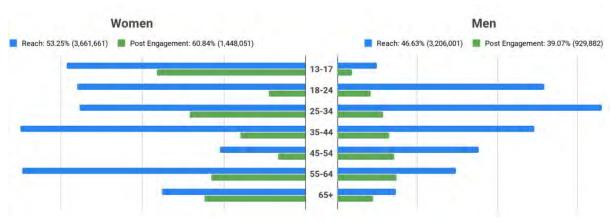


Figure 1. Overall Facebook Ads numbers of post engagements and people reached, by gender and age groups.

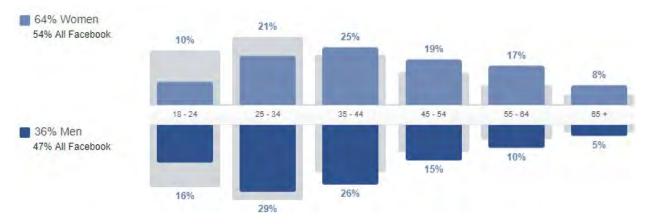


Figure 2. People connected to Comprova's Facebook Page (blue bars) compared to all Facebook users in Brazil (gray bars), by gender and age groups.

Top performing posts

The Comprova Facebook Page produced a total of 197 posts, 39 of which were also promoted in some form via Facebook Ads. The table below lists the top 10 performing posts ranked by their reach. Almost a quarter of a million people engaged with Comprova'a most popular post, largely due to ad spending. The reach of the post extended far beyond Comprova's organic followers, who accounted for 1.47 percent of the post's total reach and 23.31 percent of its organic reach.

Looking at Comprova's top 20 Facebook posts in terms of reach, Comprova's followers accounted for an average of 92 percent of posts' organic reach and 7.5 percent of their total reach.

Post	Туре	Date	Lifetime Post Total Reach	Lifetime Post Organic Reach	Lifetime Post Paid Reach	Lifetime Engaged Users	Lifetime Reach by Followers
Compares and the state of	Link	Oct. 3	1,754,453	110,829	1,676,853	240,485	25,839
Operation of the instrument of the	Link	Oct. 5	854,466	589,780	344,115	92,963	36,872
A Section 2 A	Link	Oct. 19	579,445	225,188	404,169	86,705	55,129
Control C	Link	Sep. 11	550,097	281,551	292,854	54,417	27,059
Particle Image: Control Image: Contro Image: Control Image: Contro	Video	Oc.t 16	549,899	70,210	489,461	53,242	14,065

Comparison (International System) 1000 000000000000000000000000000000000	Link	Aug. 30	517,508	302,805	224,420	49,268	9,254
<text><text><text><text><text><text><text></text></text></text></text></text></text></text>	Video	Oct. 19	447,936	57,884	387,433	14,396	22,205
Register &	Link	Sep. 29	411,663	238,756	192,123	49,442	17,825
Compared Constraints of the constraints o	Link	Oct. 16	398,364	121,372	293,153	57,594	24,172
	Link	Oct. 11	392,398	144,128	271,886	51,755	47,912

Twitter

Compared to Facebook, Twitter's user base in Brazil is much smaller. While 57 percent of registered voters have a Facebook account, only 13 percent use Twitter.⁴⁰ However, it's still an important and vibrant community for real-time discussions of news events and politics, as evidenced by the fact that it is the platform of choice for elected leaders such as Jair Bolsonaro. Thus, Comprova's content also needed to be disseminated through this social network, and Twitter's Ads for Good initiative helped the project reach a much wider audience.

Ads for Good grants, however, come with specific rules that limit their use. For example, in our case, the grant could not be used to promote specific debunks, but only Comprova's account generally. The funds could therefore only be used to increase the number of users following Comprova's Twitter account, boost media literacy material, or direct users to send rumors to Comprova via WhatsApp.

The strategy for ad targeting on Twitter was similar to that used for Facebook: two groups focused on targeting users with interests in political candidates and Comprova coalition members.⁴¹ Later, these groups were modified to include users with a general interest in "political elections" and interests in non-partner media outlets similar to those previously chosen, such as @TheInterceptBr, @elpais_brasil, @monicabergamo, and @o_antagonista.

Ad campaign groups

Since the grant provided by Twitter's Ads for Good program had specific guidelines for the types of content that could be promoted, our first ad campaign focused on increasing Comprova's Twitter followers and encouraging users to send questions about what they saw online about the presidential elections to Comprova via WhatsApp. We began to run ads in mid-September and boosted our output in the days leading up to the first election on October 7, 2018, and the second election on October 28, 2018. These ads resulted in 1,120,558 ad impressions and 11,949 follows, out of approximately 17,800 total followers by October 31. A second, smaller ad campaign was created to increase video views for a media literacy piece that was posted on October 19 to help users verify suspicious content. The media literacy campaign resulted in 113,813 ad impressions and 58,322 video views.

Demographics

40

[@]GuilhermeBoulos, @Haddad_Fernando, @LulaOficial, @ManuelaDavila, @MarinaSilva, @cirogomes, @geraldoalckmin, @jairbolsonaro, @joaoamoedonovo, and @meirelles. The latter targeted people living in Brazil, of all ages and genders, with interests similar to followers of these accounts: @BandNews, @EstadaoEconomia, @EstadaoPolitica, @GauchaZH, @NexoJornal, @Poder360, @RBandeirantes, @UOLEconomia, @UOLPolitica, @VEJA, @correio_dopovo, @exame, @folha_mercado, @folha_poder, @gazetadopovo, @jornaldaband, @novaescola, @opovoonline, @radiobandnewsfm, and @revistapiaui.



http://datafolha.folha.uol.com.br/opiniaopublica/2018/10/1983765-24-dos-eleitores-usam-whatsapp-para-c ompartilhar-conteudo-eleitoral.shtml

⁴¹ The former targeted follower look-alikes for political candidates such as @CaboDaciolo,

Sixty-five percent of ad impressions came from people between the ages of 13 and 49, divided roughly evenly by gender (52 percent male). Like on Facebook, followers of Comprova's Twitter account were more demographically skewed: among the approximately 17,800 followers, 65 percent were male, 93 percent were interested in government topics, and 50 percent were interested in TV news. Once again, this difference underscores the importance of using ads to reach larger, more diverse audiences.

Top performing posts

During the 87 days between August 6 and October 31, Comprova's tweets received about 3.7 million impressions, with 62 percent coming from organic impressions; meanwhile, 1.9 percent of exposures to Comprova's tweets led to engagement, producing 13,300 link clicks, 14,200 likes, 6,600 retweets, and 1,700 replies.⁴²

Tweet URL	Date	Total Impressions	Organic Impressions	Paid Impressions	Engagements
Restance makes tables an aleigibe greationsons? Anotake que nois verificaremos se el versade ou table. Nonse Whateappel (1197736-002. #comprovingions Anotake exercises) Ware table Ware tables Cuidado com as mentaras sompartificadas sites e a plicativos sites e a plicativos	Aug. 7	1,197,325	160,938	1,036,387	35,496
Comprove toi idealizado e desenvolvido pelo First Drate e desenvolvido pelo First Drate e o Shorenstein Center, da Harvard Kennedy School	Oct. 23	227,457	42,935	184,522	2,947
Reference of the restance log de card order adjues ancher source para verticar es order adjues ancher source para verticar es order adjues ancher source de la order adjues	Oct. 19	186,597	72,784	113,813	2,965

⁴² Organic and paid impression numbers can be combined without duplication issues.

Control of the solution of the	Aug. 8	34,302	8,948	25,354	759
Contraction of the imposite rate contralides failed and the imposite rate contralides failed and the imposite rate of the imposite rate	Aug. 8	24,024	10,248	13,776	284

Website (Google Analytics)

Social media was responsible for almost half of all Comprova's website traffic—47 percent of unique visitors, out of a total of 491,337 users from August 6 to October 31, 2018. Direct traffic followed social with 18 percent; organic search, such as from Google, totaled 17.5 percent; and referral traffic from other websites like Comprova's partners amounted to only 11 percent of visitors.

While not all social visitors came from paid campaigns, and Google Analytics' metrics are different than Facebook's (such as link clicks), Comprova's social media efforts were crucial to bringing people to the website, where they could read the entire debunk. Out of all social visitors, Facebook represented a staggering 93 percent, while Twitter contributed 4 percent Twitter users, however, spent one minute more on the website than people from Facebook, who averaged only 30 seconds.

Audience Surveys

To supplement the audience demographics offered by Facebook, Twitter, and Google Analytics, Comprova distributed a survey via its own social media accounts, its website, and the social media accounts and websites of coalition members. A link to the survey was published as a 'post' on Facebook and Twitter accounts, and the audience was told that the survey was going to be used to evaluate the project. Nearly 49 percent of participants who completed the survey encountered it via Facebook.

It is important to note that an opt-in survey such as this almost certainly suffers from selection bias. Still, the survey offers additional insight into the composition of Comprova's audience.

A total of 715 individuals participated in the survey. (However, due to drop-off and non-responses, the number of respondents that answered any one question varied slightly.)

As expected, nearly all respondents (92 percent) were residents of Brazil, with the remainder spread across countries like the United States, Portugal, the UK, and Canada. The average age of a respondent was 42.1 years old (SD = 15.0). Of the respondents, 53.2 percent were men, and 44.5 percent were women.⁴³

Survey respondents were politically involved: 81.0 percent reported they were "very" interested in politics and public affairs, with another 15.2 percent indicating they were "more or less" interested. A full 59.6 percent of respondents said they "always" paid attention to politics and topics of public interest, and another 28.7 percent said they paid attention "most of the time." These results are unsurprising, given Comprova's active attempts to target those interested in political candidates, political parties, and politics generally.

Despite political interest, respondents did not have strong partisan loyalties. A plurality (28.1 percent) of respondents said they did not identify with a political party. Moreover, of those who did identify with a political party, 83.8 percent said they were not active members of their party. The top five parties reported by participants are listed in Table 1.

Political Party	Percentage Identify
Partido dos Trabalhadores (PT)	18%
Partido Social Liberal (PSL)	12.6%
Partido Socialismo e Liberdade (PSOL)	11.6%
Partido Novo (NOVO)	8.7%
Partido Democratico Trabalhista (PDT)	7.5%

Table 1. Top five federal political parties claimed by survey respondents.

Did audiences trust Comprova reporting?

Beyond mere exposure, the audience members surveyed thought highly of the coalition:

- 79.6 percent completely or partially agreed with the statement that Comprova could be trusted.
- 81.5 percent completely or partially agreed that Comprova was accurate.
- 76.4 percent completely or partially agreed that Comprova was fair.
- 77.9 percent agreed completely or partially that Comprova told the whole story.
- 31.9 percent agreed that Comprova was biased (partially or completely). By contrast, 29.7 percent disagreed and 30.6 percent were neutral on the issue.

Perceptions of Comprova's individual reports were similarly strong:

⁴³ The rest preferred not to report their sex or selected "Other."

- 81.4 percent partially or completely agreed that reports were accurate.
- 81.0 agreed partially or completely that reports were authentic.
- 78.0 agreed partially or completely that reports were believable.
- 78.4 percent said reports taught them something they didn't know.
- 40.4 percent said Comprova helped them to decide their vote, while 27.4 percent was neutral on the issue and 32.2 percent disagreed.

More than 70 percent of respondents said they shared or discussed Comprova debunks in order to inform someone. A majority of these conversations were with family, friends, and colleagues—with 41.3 percent reporting having talked to friends, 27.6 percent to family, and 18.8 percent to colleagues.

Did Comprova reports impact the beliefs of audience members?

To test the efficacy of Comprova's debunks at an individual level, we conducted a separate survey experiment in the months following the second round of the 2018 Brazilian federal elections.

Research Design

A sample of 511 Brazilian adults⁴⁴ viewed (1) a suspect piece of social media content that circulated widely during the 2018 Brazilian federal elections and then (2) a relevant report produced by Comprova.

Respondents began the survey by indicating their party affiliation and political ideology. They also specified whether they would vote for Fernando Haddad or Jair Bolsonaro if the second round of the federal election were held today. Based on their answer to this last question, participants were block-randomized to view one of two videos. The first video consisted of a montage of news reports describing three of Jair Bolsonaro's (real) convictions in civil court for insensitive, racist and homophobic comments. The second video appears to depict an independent, pro-Bolsonaro demonstration in Jerusalem. However, in reality, the video showed the Brazilian delegation of a larger Christian march intended to show solidarity for Israel.⁴⁵

⁴⁵ The conclusion of the first report was unfavorable to Bolsonaro, whereas the conclusion of the second was favorable to him. As importantly, the first report confirmed the suspect content, whereas the other corrected the suspect content. Ideally, the stimuli would also have included pro-Haddad and anti-Haddad debunks. However, Comprova only verified a handful of claims explicitly referencing Haddad.



⁴⁴ Participants were recruited via Lucid, an online panel company that computationally compiles participants from several online panels and approximates representative samples using standard quota sampling techniques. Demographic information available here: <u>http://bit.ly/2WEUkNJ</u>. Five participants dropped off before the end of the survey. Their responses were retained.

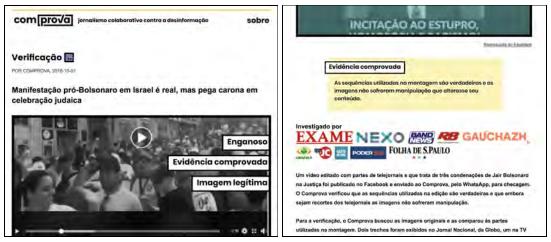


Figure 1. Snapshots of the report stimuli used in the survey experiment.

Participants then viewed a written Comprova report addressing the video they had just watched. Respondents were asked to rate how much they believed the core fact supported by the video they had viewed at three points: immediately before the video, immediately after the video, and immediately after the Comprova report. Belief was measured with an 11-point belief scale that ranged from "Completely false" (1) to "Completely true" (11).

After viewing the Comprova report, participants used a five-point scale ranging from "Completely disagree" to "Completely agree" to indicate how much they agreed Comprova was trustworthy, accurate, fair, and biased. They also indicated how much they agreed Comprova "told the whole story."⁴⁶ After reverse-scoring answers to the question dealing with bias, responses to these questions were averaged to produce a credibility score for Comprova.

Both Reports Were Effective at Changing Beliefs

The data show that both Comprova reports moved beliefs in the expected direction. After viewing a montage of news clips describing Bolsnaro's moral outrage convictions, participants on average reported tentative belief that the convictions were real (M = 6.82). After reading a Comprova report that affirmed the core fact of the video, belief ratings rose to an average of 7.24—a statistically significant difference. The rise in belief ratings suggests that, in the short term, the report increased beliefs in the claim (Table 1).

Similarly, after viewing a video supposedly depicting a pro-Bolsonaro demonstration in Jerusalem, participants on average reported a timid belief that the demonstration was real (M = 6.81). After reading a Comprova debunk that contradicted this claim, belief ratings dropped to an average of 5.50. This difference is also statistically significant (Table 1).

Pre-Report	Post-Report	Difference
------------	-------------	------------

⁴⁶ Questions were pulled from <u>Meyer (1988)</u>. The scale's Cronbach's alpha value was acceptable (α = .80).



Moral Outrage	6.82	7.24	0.42**
Jerusalem Demonstration	6.81	5.50	1.31***

Table 1. Effects of Comprova reports on beliefs of all respondents. Standard deviations reported in parentheses.(* significant at p < .05, ** p < .01, *** p < .001).

In all, 62.2 percent of respondents said they had, prior to the study, heard about the claim at issue in the video they viewed. Moreover, 45.2 percent said they had previously seen a correction of the same claim. Thus, I reevaluated the effect of corrections after excluding those participants who had previously seen a correction. Under these conditions, the effect size of the report confirming Bolsonaro's convictions fell to .21 and below statistical significance. However, the effect size of the debunk discrediting the notion of a pro-Bolsonaro demonstration in Jerusalem expanded to 1.80 (Table 2).

Understandably, the effect of Comprova's reports seem to have varied according to the information the respondents had previously seen. When respondents reported having seen information denying that Bolsonaro had been convicted in court for his comments (as described in the stimulus video), Comprova's report was not effective. However, when respondents had previously seen corrections of the supposed Jerusalem demonstration video, the effect of Comprova's debunk was magnified.

	Pre-Report	Post-Report	Difference
Moral Outrage	7.10	7.31	.21
Jerusalem Demonstration	6.22	4.42	1.80***

Table 2. Effects of Comprova reports on the beliefs of those respondents who had previously seen a correction for the claim they viewed. Standard deviations reported in parentheses. (* significant at p < .05, ** p < .01, *** p < .001).

Conclusion

The paid social media campaigns were greatly responsible for connecting Comprova's content to a wider audience during the three months the project operated. Gaining followers in social platforms is a long-term commitment and algorithms tend to curb organic reach, so promoting posts is an efficient way to quickly show relevant information to a properly targeted audience that is more likely to have an interest in the subject.

Promoted posts were especially relevant for this project, since it strived for journalistic balance in covering left- and right-wing political reports. An analysis of Comprova's Facebook Page fans indicates that fans identified as left wing and followed Pages of politicians like Manuela D'Ávila and Fernando Haddad, and political parties like PSOL and PT (Partido dos Trabalhadores).



Initial ad groups targeted interests by each major candidate separately, meaning each promoted post had several duplicate versions going to different audiences. Reports showed that the results in terms of reach and engagement were basically the same, varying only in cost, so later ads grouped people interested in one or all candidates. Since Facebook defines targeting by interest and is not entirely open to the public, a person's interest in a candidate may be positive or negative, so the impact of misinformation debunks could differ depending on political preference.

How exactly people were impacted by Comprova's posts would require a qualitative content analysis of their comments and reactions, but at the very least the social media strategy allowed the content to be discovered and engaged with by a relevant segment of the voting population. Future projects could improve upon the employed strategy by pre-planning the use of additional social platforms such as YouTube or Instagram, which were also used by Comprova but with modest results due to more limited availability of visual resources like videos or infographics.

Our survey experiment suggests that Comprova's reports, in the short term, changed beliefs at the individual level. Two qualifications of the survey experiment must be noted. Although the approach of asking participants in correction experiments to rate beliefs multiple times has been used before,⁴⁷ this design may be vulnerable to demand characteristics. In other words, participants may have rated their beliefs as having changed because they *thought they should*—not because they *in fact did*.

Acknowledgements

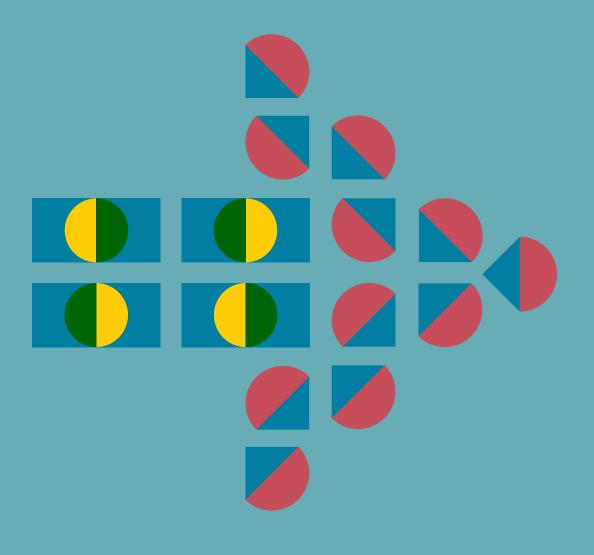
As this detailed report demonstrates, collaborative projects on this scale are not only logistically challenging, but they also require a large number of individuals to take a giant leap of faith, both in the idea and in each other. We sincerely thank every journalist who believed enough in the concept and the overall ambitions of Comprova to dedicate time, energy, enthusiasm and patience over many months. We thank Adriana Garcia and Angela Pimenta for steering and shaping the project from the ground in Brazil. We thank Daniel Bramatti and his team at Abraji for extraordinary efforts to launch and support Comprova from the outset. We thank Sérgio Lüdtke for his principled and passionate editorial leadership, and all others on the central support team in Brazil who worked tirelessly to react, adapt and improve as the project gained momentum. We thank Marco Túlio Pires from Google News Lab, Brazil, for his proactive and engaged support, and all other organizations and institutions that contributed technology and resources. Thanks also to the following people who helped to propel Comprova's work to Brazilian voters: Maíra Carvalho at Facebook, Gustavo Poloni at Twitter, and Carl Woog and Ben Supple at WhatsApp.

Moving on to overseas support, we sincerely thank the teams at Stacker, CHD and Small Axe in London, for their assistance in designing and developing the Comprova brand and collaborative

⁴⁷ Swire et al. (2017)



platform in record time. We thank Grégoire Lemarchard from AFP in Paris for graciously sharing training and consultancy based on his experiences as a member of CrossCheck France. We thank First Draft's core project team, led by Aimee Rinehart, for driving the project forward across time zones and language barriers. Finally, we thank Nic Dias, for his contribution to refining systems and processes, and for his invaluable leadership in coordinating this research and helping First Draft to effectively test, evaluate and continue its efforts to fight disinformation through collaboration.



com[prova]

Powered by



Supported by

Google News Initiative

