End-to-End Fact-Checking

Platform Development for 5 Global Fact-Checking Organizations Working on the WhatsApp Business API
The Task

Scale up Check, Meedan’s verification and fact-checking platform, to serve as a workflow management and content toolkit for 5 global newsrooms running fact-checking tiplines on the WhatsApp Business API.

From October 2019 through a global pandemic, Meedan has been pushing code, running field studies and testing workflows in concert with AFP (India and Brazil), Africa Check, BOOM and India Today.

Nearly 5,700 fact-checks later, here’s what we learned.
Nearly 5,700 fact-checks in 5 months across India, Brazil, South Africa, Kenya and Nigeria

Cumulative number of unique fact-checks

- Dec: 20
- Jan: 81
- Feb: 647
- Mar: 2,530
- Apr: 4,712
- May: 5,694
Executive summary

Over 5 months, the Meedan team, working with WhatsApp, Facebook, AFP (India and Brazil), Africa Check, BOOM and India Today learned key insights in how to run effective fact-checking tiplines on WhatsApp while respecting end-to-end encryption.

1. **Bots are the new audience engagement paradigm.** A WhatsApp bot can serve three purposes: (1) help audiences understand how to interact with the fact-checking team and see commonly-requested content, (2) serve as a bridge between a human editor and someone submitting content to a tipline and (3) cut down on unactionable content.

2. **Machines in the loop augment quality human efforts.** Already designed for human work, Check now automates everything from content matching to intake, helping fact-checkers do their jobs more efficiently and therefore more effectively.

3. **Follow the news cycle.** Newsrooms learned that a topic-oriented approach to tipline promotion following the news cycle yields stronger audience engagement and submissions. After the outbreak of COVID-19, we saw an uptick in the percentage of quality, actionable content, in turn generating better fact-checks.

4. **Fact-checkers need no-nonsense, no-code interfaces.** Over the course of field studies and through weekly working calls, we steadily adapted our toolkit to help fact-checkers focus on the fact-checking rather rather than technical tasks. This enabled teams to customize their workflows.
"We used to get inundated by the thousands of messages that people would send us on WhatsApp.

Check has not only made it possible for us to sift through the fact check requests quickly, it also helped deliver most of our readers with fast and personalized responses.

This helps us build a direct bond of trust with our audience.

86,974 messages received and triaged since January by 2 full-time fact checkers
Meeadan = Journalism + Software

Founded in 2006, Meeadan has been working at the intersection of open source technology, digital journalism, and social change to tell stories and improve societies with extraordinary global partners.

Check, our flagship collaborative verification and fact-checking tool, has powered three of the last four years’ Online Journalism Awards winners for collaborative journalism. Our workflows and tools have powered Electionland, Verificado, and Checkpoint, among others.
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“The Check tool has helped increase our direct engagement with audiences and shown the path for substantial scale-up and impact in our fact-checking endeavours.

13,236 unique WhatsApp users interacted with the tipline bot
The Check Platform

Check is a web application for journalists to verify and annotate online information, creating datasets to structure open-source investigations.

During this pilot, Meedan developed and designed key features to support scaled-up work on tiplines running on the WhatsApp Business API.

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**Check Components**

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<td>Customizable bot conversations</td>
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5 countries and 4 languages

Pilot partners represent a range of newsroom and audience sizes and target audiences, spread across multiple languages and continents.
Africa Check operates a tipline across three countries. The Check workflow allows fact-checkers across all our teams to collaborate and follow the same methodology.
Three phases of impact

Over three major phases, we enabled new workflows through product development and editorial strategy to increase both efficiency and impact. Over the pilot, we shipped 214,455 lines of code.

- Product and user research
- General paid promotion
- COVID-19 crisis and shift to topical promotion

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Major product releases and editorial support
COVID-19: Follow the news cycle

Fact-checks have tended to follow the news cycle, as evidenced by COVID-19 topical submissions. While the percentage of disease-related fact-checks grew, the information crisis also gave more exposure to the tiplines, and many more queries were sent on other topics.
Fast forwarding claims to newsrooms

With enough volume of inbound queries coming through the tiplines, journalists have first spotted trending pieces of misinformation on Check – leading to more investigation, followed by publishing articles on their main websites.

"In the Indian context, we spot misinformation first on WhatsApp. With Check, we were able to immediately send users a report, while also writing longer blog posts on that claim that will be read across different platforms."

Uzair Rizvi
Fact-checker
AFP India
COVID-19 Topic Highlights

Some of the top-requested fact-checks ranged from conspiracy theories about the origins of the virus, types of cures, and restrictions on movement.

Government
April 3  No, WHO did not release a COVID-19 lockdown protocol
April 4  The Indian government did not ban reporting on COVID-19

Cures
March 23  No, tea is not a cure for COVID-19
March 23  WHO report does not say Coronavirus stays in cabbage

Conspiracy Theories
March 14  The world isn’t coming to an end on April 29
March 2   Chinese state conspiracy theory on the origin of COVID-19
"We’ve been running a tipline for two years, and this is the tool we have been waiting for.

One that can make the newsroom process of finding misinformation more efficient and automate the responses.

628 fact-check reports automatically matched and sent in response to duplicate user queries.

Jency Jacob
Editor
BOOM
Insight: Machines in the loop augment human fact-checking efforts.

We had a difficult task: empowering fact-checkers, who have the best instincts, know-how and training to deal with complex topics, to work at the scale of WhatsApp. The Meedan development team worked on a machine-in-the-loop system that automated key repetitive tasks, saving people time and energy for higher-order work and research.

In our research, we found that the most time-consuming task for journalists is to parse through large volumes of inbound queries to find the one that need prioritization. Text and image clustering in particular proved essential to triaging content by demand, helping teams prioritize items for response.

At the same time, we’ve built our database to integrate inbound content from the tielines with newsrooms’ existing databases of fact-checks, thus augmenting previous work they’ve done.

Glad to inform we have addressed 500 verification reports using Check. Big milestone for us!

Anmol Alphonso
Fact-checker, BOOM
Feature: Hybrid human and machine system

Bots and algorithms take care of the most repetitive and generic tasks, helping journalists focus on high-level editorial tasks.

1. New query from a user
2. Image and text clustering to surface claims in demand
3. Has this claim been fact-checked already?
   - Yes: Fact-check sent to users
   - No: Automatic triage and categorization based on editorial preferences
4. Journalists review automatic processes and compose editorial response
5. New fact-check is published
Insight: The bot editor is the new audience engagement editor.

In a mobile-first world, bot editors are newsrooms’ front lines. Especially in low-bandwidth settings, WhatsApp is a key vector for building trust with audiences. Tiplines enable newsrooms to understand the evolution of demand directly from their communities and detect emerging topics and concerns even before they hit social media networks.

News cycles are fast – this is nothing new. What’s new is that we’ve tailored our bots and bot editing interfaces to allow newsrooms to present newsworthy content at users’ requests. Bots need to be customized with local content in local languages in order to engage and serve audiences with content that matters to them. Tiplines are more than an opportunity to collect tips: they’re an opportunity to build community.
Feature: Deploy multilingual bots in minutes.

Recognizing the possibilities of automating responses to commonly-requested content, we developed both a bot and a bot interface, allowing for quick testing, customization and deployment of content across multiple languages.

Design your bot

Main menu - A menu asking the user to choose between a set of options. This message automatically follows the Greeting message.

*Main Menu*

*Reply 1* (or ️) to submit a request for a fact-check about an article, video, image, or other content.

*Reply 2* (or ️) to get the latest information about coronavirus disease (COVID-19)

Hindie ke liye, *hin pravishit karen*

IF The following keyword is matched   THEN respond with
1. fact-check, ️  Query prompt

IF The following keyword is matched   THEN respond with
2. covid, coronavirus, ️  Secondary menu

IF The following keyword is matched   THEN respond with
3. Hindie ke liye, *hin pravishit karen*  Main menu
Insight: Newsrooms need a plug-and-play, customizable workflow suite.

Journalists are working at all hours of the day in rapid cycles. The last thing they need is a tool that requires extensive technical skill or consultations with an engineering team. The Meedan team prioritized developing no-nonsense, no-code interfaces that enable journalists to organize, analyze and prioritize their work without technical support.

Each newsroom needs to tailor the logic of their workflows based on their own editorial decisions and priorities, languages, audience demands and the needs of the news cycle. After hours in on-site research in India, Brazil and South Africa followed by weekly calls and near-daily chats, we developed workflows that have enough structure to work out of the box and enough flexibility to enable journalists to customize their workflow accordingly.

"Check really improved the way we communicate with our readers on WhatsApp.

Now, we can be sure anyone who reaches out through the app will have an immediate and consistent reply, while having time to dedicate ourselves to other parts of the verification process."

María Clara Pestre
Fact-checker, AFP Checamos
Feature: Customize editorial workflows

Each fact-checking team customized every step of their workflow, building from a base set of features that they could easily tailor to their unique contexts.
Feature: Publish fact-checks at WhatsApp speed

Teams customize the visual appearance and content of their fact-checks before sending them back to users. This allows these items to be readily shared and forwarded with URLs back to the newsrooms’ web sites.
Feature: Triage content on a custom dashboard

Create lists to automatically categorize inbound requests based on editorial preferences and access all stages of the fact checking pipeline in seconds.

Assess the virality of content submitted to the tipline using key metadata points such as the number of tipline requests and the number of Facebook shares.
Sample Fact-Checks by Team

This school textbook in India does not mention a cure for COVID-19.
China’s whistleblower Dr. Li Wenliang did not suggest tea as a cure for COVID-19.

Type: Text - 5 Requests

*Breaking News from CNN*: *Dr. Li Wenliang*, China’s hero doctor who was punished for telling the...
Sample Fact-Checks by Team

FALSE No, the Indian government did not ban reporting on COVID-19.

Type: Linked article - 93 Requests

Centre Seeks SC Direction That No Media Should Publish COVID-19 News Without First Ascertaining Facts With...

The Central Government has sought a direction from the Supreme Court that no media outlet should print, publish or telecast anything on COVID-19 without first ascertaining facts from the mechanism..


Group admin is requested to close group for 2days as police can take action against admin & group members vide section 66, 140 & 188 if anyone even by mistake post joke on corona. Everyone could be in trouble. Hence I draw the attention of group admin to take necessary steps.

Dear All,

Mandate for All:

Tonight 12 (midnight) onwards Disaster Management Act has been implemented across the country. According to this update, apart from the Govt department no other citizen is allowed to post any update or share any forward related to Corona virus and it being punishable offence.

Group Admins are requested to post the above update and inform the groups.

Please adhere this strictly.


Smuch 2 months ago · WhatsApp · Slack channel
Sample Fact-Checks by Team

Misleading
No, this woman from Australia was not spitting on fruits.

Type: Video - 9 Requests

Esta mulher foi presa por discutir com funcionários e o vídeo mostra dois incidentes diferentes

Video - First seen: 3 months ago - Last seen: 2 months ago -

REQUESTS TASKS ANALYSIS NOTES ACTIVITY

WhatsApp ▪ 3 months ago ▪ Whatsapp

É real?

Smooch 3 months ago

Smooch 3 months ago

WhatsApp ▪ 3 months ago ▪ Whatsapp ▪ Video channel

No message was sent with the request

Smooch 3 months ago

Smooch 3 months ago

WhatsApp ▪ 3 months ago ▪ Whatsapp

Reverse image search

Google
Built by a team with firsthand experience of the problems we are solving for journalists.

Ed Bice
CEO

Pierre Conti
Director of Product

Shalini Joshi
Program Director, APAC

An Xiao Mina
COO

Wafaa Heikal
Program Manager, Africa

Karim Ratib
CTO

Dr. Scott Hale
Director of Research

Isabella Barroso
Program Manager, Latin America

Tom Trewinnard
COO, Fathom
Shalini Joshi, Program Director, APAC, and Pierre Conti, Director of Product, in meetings and site visits with India Today, BOOM and AFP India.
About Meedan

Meedan is a global technology not-for-profit that builds software and programmatic initiatives to strengthen journalism, digital literacy, and accessibility of information online and off. We develop open-source tools for creating and sharing context on digital media through annotation, verification, archival, and translation.

We work with technologists, newsrooms, fact-checkers, public health professionals, NGOs and academic institutions on award-winning projects from election monitoring to pandemic response to human rights documentation. This work supports our vision of a more equitable internet.

Please visit meedan.com for the latest information about Meedan and its initiatives.
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