



HS - 202

PROJECT

REPORT

Media

Literacy & Awareness

TA : Vineeta Devi

Prepared by group - 22



- Rohith P (2023mcb1312)
- Praneeth J V (2023csb1296)
- Viswateja C (2023mcb1293)
- Prathvik P (2023mcb1307)
- Goutham N (2023mcb1295)
- Ritvik K (2023mcb1219)
- M Akash (2023ceb1038)
- Harsha K (2023mcb1216)
- Likhit N (2023csb1139)



ACKNOWLEDGEMENTS

We would like to thank our course instructor and Teaching Assistants for their guidance and support throughout this project. We are especially thankful to our TA, Mrs. Vineeta Devi, and to our lecturer, Mr. Chandan Behera from the department of Humanities and Social Sciences, for helping us at every step with their feedback and suggestions.

We are also grateful to the students, faculty, and staff of IIT Ropar who took part in our Google Forms survey. Their responses provided valuable insights into how individuals interpret, question, and respond to information they see online.

Finally, we deeply appreciate the collaborative environment and the resources provided by IIT Ropar, which enabled us to successfully carry out this study on media literacy and awareness. We hope our findings contribute, even in small way, toward fostering more informed and responsible media consumption among our community.

Table of contents

01 Abstract	01
02 Problem Statement	02
2.1 Origin of the Problem	
2.2 Detailed Problem Statement	
2.3 Significance of the problem	
03 Methodology & Analysis	06
3.1 Our Methodology	
3.2 Survey Analysis & Observations	
3.3 Current Developments	
3.4 Media Literacy Gaps	
3.5 Efficacy of Bias Detections	
04 Proposed Solutions	20
4.1 Tech Driven Solutions	
4.2 Community & Behavioural shifts	
4.3 Empowering through Education	
4.4 Policy & Regulatory Frameworks	
05 Results	34
5.1 Results & Discussion	
5.2 Importance & Benefits of the solution	
5.3 Expected Outcomes	
06 Constraints & Barriers	36
07 Conclusion	37
08 Plan Of Action	38
09 References	39
10 Contributions	40



TIME TO TEACH SOCIAL MEDIA AWARENESS

1 Abstract

- In today's digital era, media plays a significant role in shaping how people think, act and interact, but it also brings challenges such as misinformation, sensationalism, bias and the idolization of public figures. The rapid spread of fake news on social media creates confusion and mistrust, while exaggerated or biased reporting can influence public opinion, magnify fear, and tamper with perceptions of reality. At the same time, the glorification of celebrities and influencers impacts youth behaviour, consumer choices and social values. This project deals with these issues to understand how cultural, political and economic factors shape media narratives and public reaction. It highlights the importance of promoting media literacy-teaching individuals to think critically, verify facts and recognize bias, so they can interact responsibly with information. By producing awareness and analytical thinking, the project aims to help individuals make use of the digital world and become well-informed subjects in today's media-driven society.



2

Problem Statement

2.1

Origin of the Problem

2.2

Detailed Problem Statement

2.3

Significance of the Problem



2.1 Origin Of the Problem

We have compiled insights from global and national reports emphasizing the pressing need to embed digital and media literacy within mainstream education systems.

The screenshot shows the UNESCO website's news section. A red pushpin is pinned to the top of the page. The main headline reads: "New UNESCO Issue Brief Reveals Global Gaps in Media and Information Literacy Policies and Education". Below the headline, a sub-headline states: "Anyone scrolling through social media today may encounter breaking news, health 'hacks,' AI-generated images, and viral videos.all blending".

The screenshot shows the Forbes website's aerospace & defense section. A red pushpin is pinned to the top of the page. The main headline reads: "Social Media Literacy Still Lacking – Could That Change?". Below the headline, it says: "By Peter Suciu, Contributor. © Peter Suciu covers trends in the world of aeros... Published Feb 09, 2025, 01:57pm EST".

The screenshot shows the Economic Times' news section. A red pushpin is pinned to the top of the page. The main headline reads: "Sensationalism over serious news, newspapers' struggle, 'rampant' paid news on Par panel's agenda". Below the headline, it says: "Published Feb. 11, 2025".



The screenshot shows the Organiser website's Bharat section. A red pushpin is pinned to the top of the page. The main headline reads: "Beyond the Headlines: The hidden bias against India in global media". Below the headline, it says: "In an era of 24/7 news cycles and algorithm-driven narratives, global media outlets are often perceived as impartial watchdogs of international affairs. Yet, when it comes to India — a thriving democracy, rising economic power, and strategic voice of the Global South — the coverage is frequently tinted with selective outrage, underestimating of achievements, and misplaced moral high ground".

The screenshot shows the India Today NE website's homepage. A red pushpin is pinned to the top of the page. The main headline reads: "Meta Launches Digital Safety Program for Middle Schoolers". Below the headline, it says: "Published Feb. 11, 2025".

The screenshot shows the The Brown and White website's opinion section. A red pushpin is pinned to the top of the page. The main headline reads: "Editorial: How a lack of media literacy shapes our reality". Below the headline, it says: "By Brown and White Editorial Board — November 14, 2024 — Updated: December 4, 2024".

The screenshot shows the PNAS website's research article section. A red pushpin is pinned to the top of the page. The main headline reads: "Negative media narratives tank Manipur University's NAAC and NIRF rankings". Below the headline, it says: "Manipur University, once a thriving center for education and scientific research, secured an NAAC 'A' grade (CGPA 3.02) in 2017, valid until 2022. But midway through 2018, a storm has erupted with administrative scandals leading to the student protests".

The screenshot shows the Central Institute of Educational Technology (CET) website's media literacy section. A red pushpin is pinned to the top of the page. The main headline reads: "Media Literacy". Below the headline, it says: "Five-Hour Online Training on Media Literacy".

The screenshot shows a collage of logos and text related to media literacy training. It includes the CET logo, the Ministry of Education logo, and the Indian Institute of Mass Communication (IIMC) logo. The text reads: "Online Training on Media Literacy", "Organized by Central Institute of Educational Technology (CET), IITR, New Delhi in collaboration with Indian Institute of Mass Communication (IIMC), New Delhi", "13 Oct. - 17 Oct., 2025", "4:00 pm-5:00 pm", and "03".

2.2 Detailed Problem Statement

In recent times, due to the boom of artificial intelligence and people's lack of awareness of it, many individuals are maliciously exploiting it to spread misinformation which benefits their narrative. Flashy headlines are spread throughout the internet which are designed carefully to attract the callous mind of people who don't know the ground reality. Some of the major reasons why fake news spread are discussed below:



Idolization of Public Figures

Oftentimes, people have misplaced faith in the public figures and blindly believe them. They do not distinguish the art from the artist which gives the public figures a power over the narrative of the news.



Sensationalism in Media

Flashy headlines get popularized thanks to the general populace small attention time. Despite lack of clear evidence, media channels pickup a narrative and sensationalise it for higher trps than their competing channels and compromise on the authenticity of the news.



Bias and Media Narratives

Media narratives often reflect who controls them. Major news channels, influenced by corporate sponsors, shape stories to fit certain agendas. For instance, when a criminal belongs to one community, the whole group is blamed, but if from another, it's treated as an isolated case.

2.3 Significance of the Problem



The Rise of Social Media and Digital Dependency

Since 2015, social media has become deeply embedded in daily life. Platforms that once focused on connection now serve as major sources of news and information. People have become heavily reliant on digital platforms for awareness, learning, and communication. However, this dependency has also exposed users to unfiltered and potentially harmful content.



The Escalation of Misinformation

Misinformation spreads faster than verified facts due to algorithms favoring engagement. The rise of AI-generated content (e.g., deep fakes, fake news) has made false information more convincing. Anyone with access to the internet can now create and distribute manipulated content widely. This increasing flow of false information makes it hard to identify what's real and what's fabricated.



Societal and Psychological Impact

Misinformation can influence public opinion, distort reality, and manipulate emotions. It contributes to social divisions, political polarization, and reduced trust in media and institutions. Continuous exposure to fake or biased information can lead to anxiety, confusion, and mistrust. In the long term, this erodes societal unity and shared understanding of truth.



The Urgent Need for Action

The issue is rapidly escalating and requires immediate intervention. Without timely action, misinformation could destabilize societies and undermine democracy. Promoting media literacy and critical thinking can empower people to verify facts and think independently. Encouraging responsible digital habits and ethical media practices can make social media a more trustworthy space. Proactive measures now can prevent a future global information crisis.



3 Methodology & Analysis



3.1

Our Methodology

Survey Analysis & Key Observations

3.2

3.3

Current Developments

Media Literacy Gaps

3.4

3.5

Efficacy of Bias Detections

3.1 Our Methodology



We have used a 3 step procedure to address our proposed problem. The following are the steps followed in the respective order.

Step 1: User Feedback Collection - [Survey Link](#)

We administered a structured survey within our college community to gather feedback on experiences, difficulties, and perceptions related to senior citizens using digital technologies. The results provided fundamental insights into unique needs and obstacles.

Step 2: Literature & Survey Review

We examined key research papers, government publications, and industry documents to discern patterns and find existing methods that impact how seniors interact with technology. This contextual review enhanced our understanding of widespread issues and common safety risks.

Step 3: Designing the Solution

Using insights gained from both the survey and literature analysis, we developed recommendations tailored to the specific requirements of seniors. Our method integrates these findings to create a digital environment that is user-friendly, inclusive, and safe.

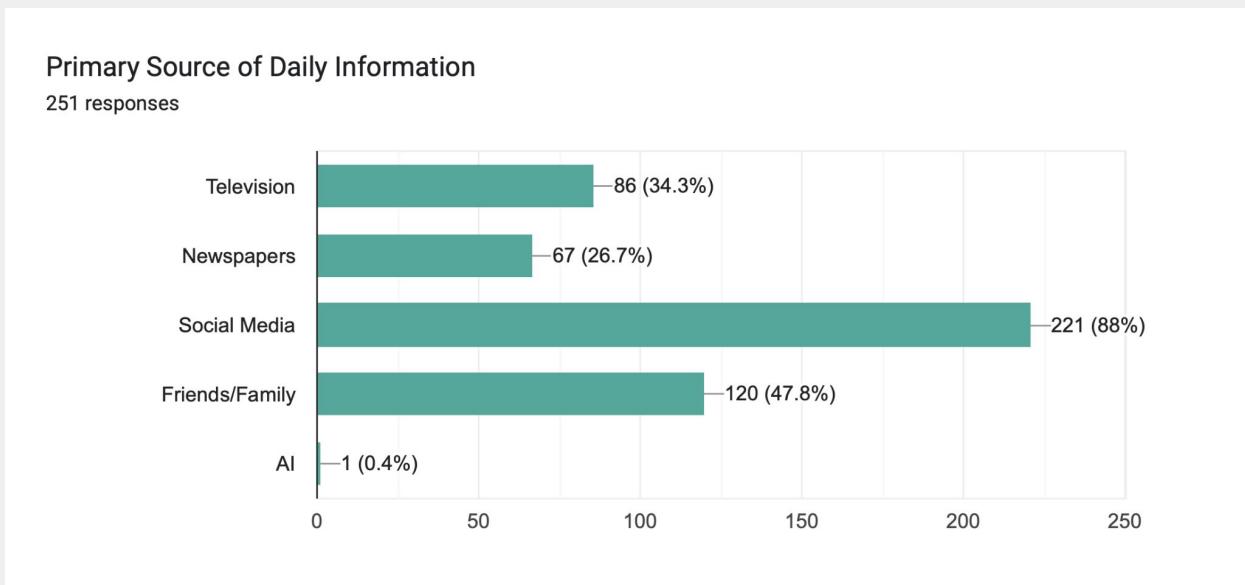
3.2 Survey Analysis and Key Observations

Our survey explored how people interact with information on social media – how they consume it, how they verify it, and how it shapes their opinions and emotions. The responses gave us a clear picture of how deeply social media has influenced people's everyday thinking and decision-making. Below are the main observations drawn from the data.



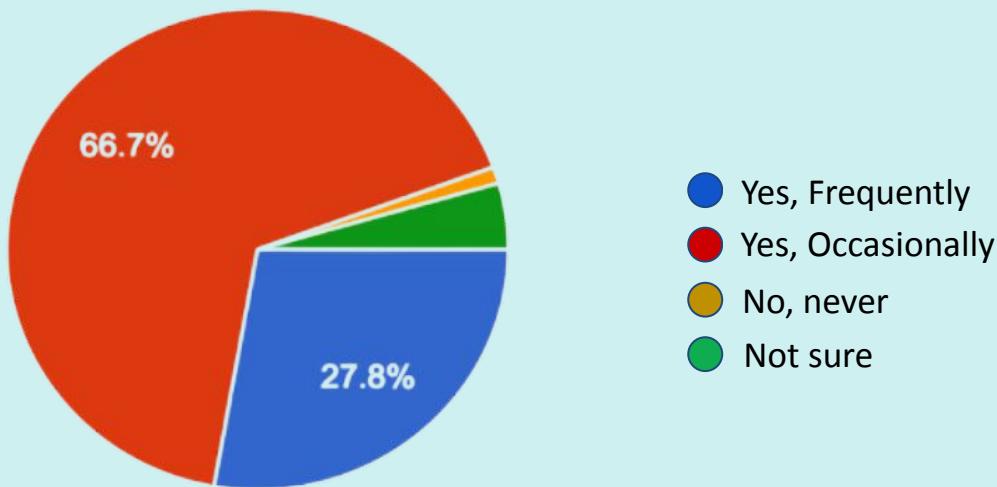
Social Media as the Main Information Source

About 88% of respondents said that social media is their primary source of news and information. This shows just how dependent people have become on online platforms for updates, and it also highlights why media literacy is more important than ever – people need to know how to tell what's true and what's not.



Most people have fallen for fake news

The majority of the participants admitted that at least once in their they had believed a fake piece of news before realizing it was real. This shows how easily the misinformation spreads and how easily it blends into the flood of content people see online.

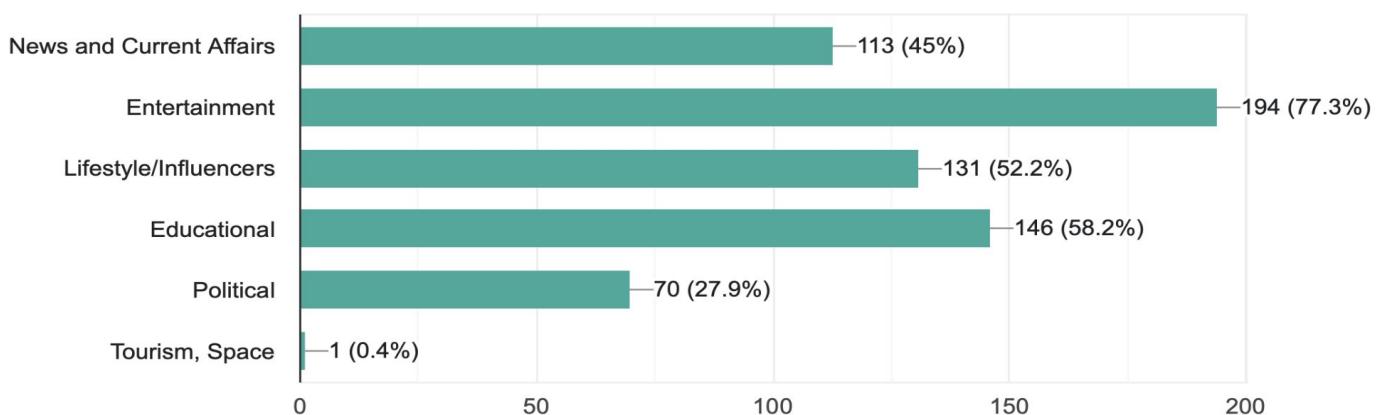


Entertainment Over Everything

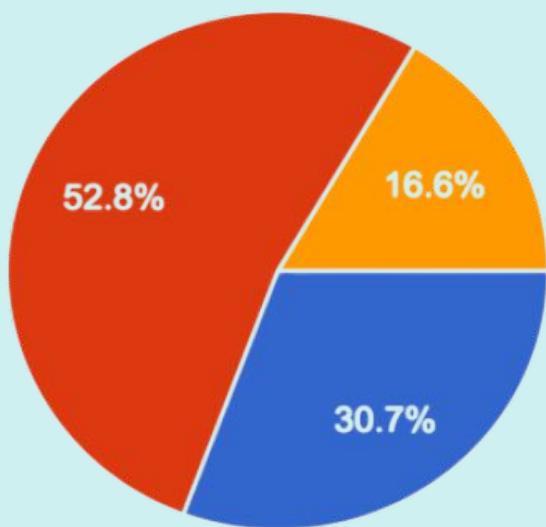
Nearly 77% of people said they engage more with content that's entertaining. While that sounds harmless, it explains why sensational and "spicy" content spreads so easily, even when it's fake. For many content creators, this becomes motivation to post misleading stories just to gain views, followers, or revenue.

What type of content do you engage with most often?

251 responses



Low Use of Fact-Checking Sources



- Yes
- No
- Maybe



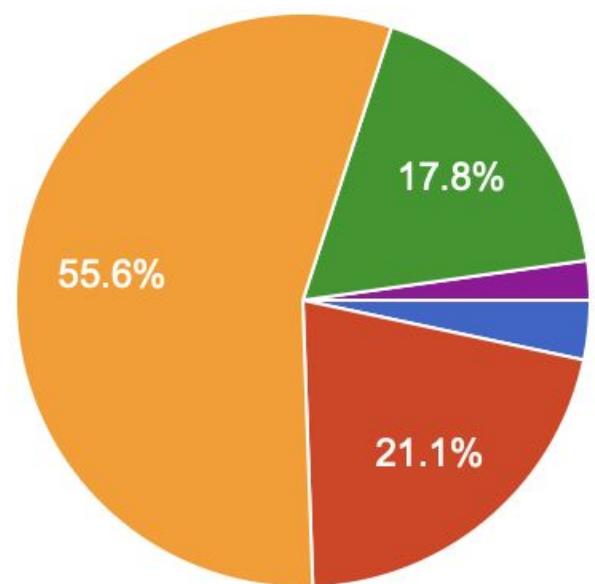
Only about one-third (30.7%) of people said they actually check facts using reliable websites or tools. Most rely on what others say or post , which can easily be wrong. This shows a clear need to promote fact-checking habits and make verification tools easier to access.

Uncertainty in Spotting Fake Content



- Not confident
- Slightly confident
- Somewhat confident
- Confident
- Very confident

Many people said they don't feel confident in telling real news apart from fake news. This sense of uncertainty makes it easy for misinformation to spread unchecked and reflects how crucial media education and awareness have become

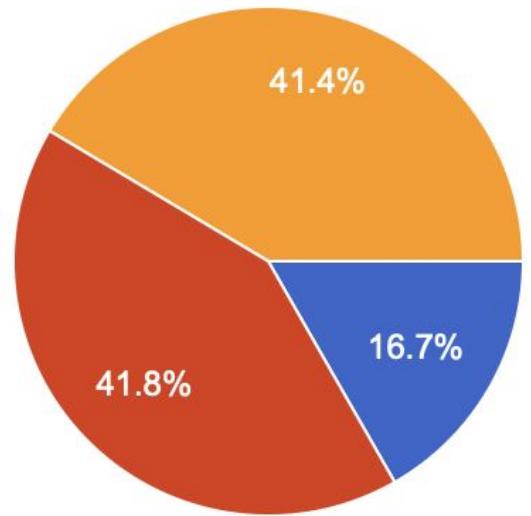


Influencers and Consumer Behavior

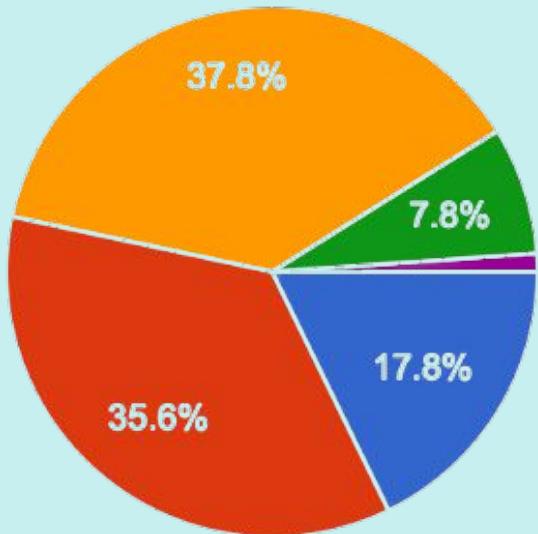
Majority of the people said they would pay more for celebrity-endorsed items, which shows how much trust and influence celebrities hold, even when credibility is questionable.



- Yes, significantly more (5-20%+ premium)
- Maybe a small amount (under 5% premium)
- No, price should be the same



Sharing Without Verifying



Around 50% of respondents said they have shared content without verifying it first. This is a major reason why false information spreads so quickly - it shows how easy it is to pass along something that feels true but isn't.

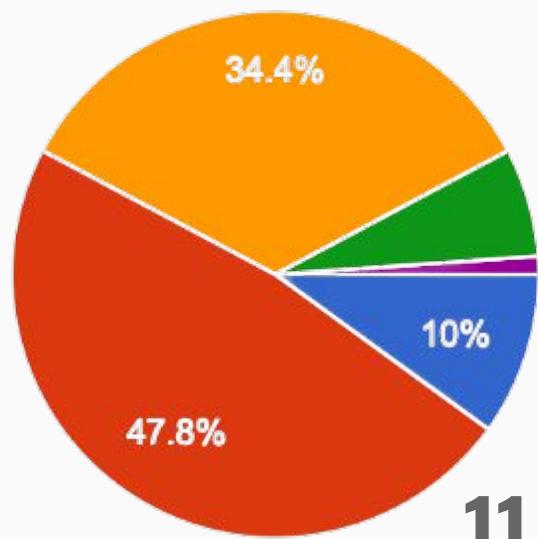
- Always
- Often
- Sometimes
- Rarely
- Never

The Power of Influencers

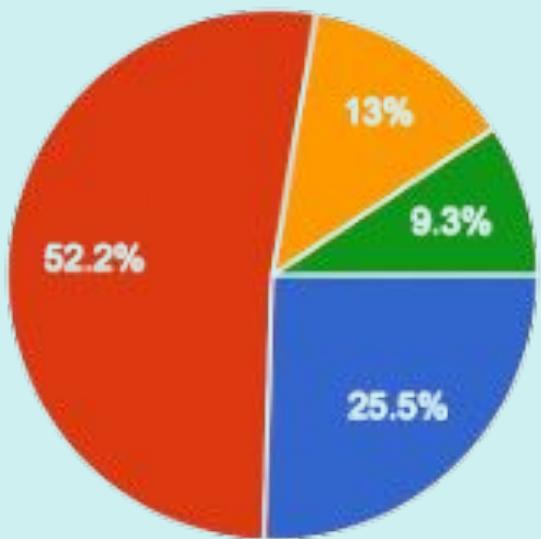
A huge 90% of respondents said that influencers have a strong effect on what people think and how they behave online. This means influencers have a real responsibility in what they post, because their reach can make misinformation spread even faster



- Not at all
- Slightly
- Moderately
- Strongly
- Very strongly



Clickbait Everywhere



Around 90% of participants said they often come across clickbait headlines (exaggerated titles) made to grab attention. This shows that the “attention economy” still dominates online spaces, and misleading headlines are being used as tools for engagement and profit.

- Very frequently
- Often
- Rarely
- Sometimes

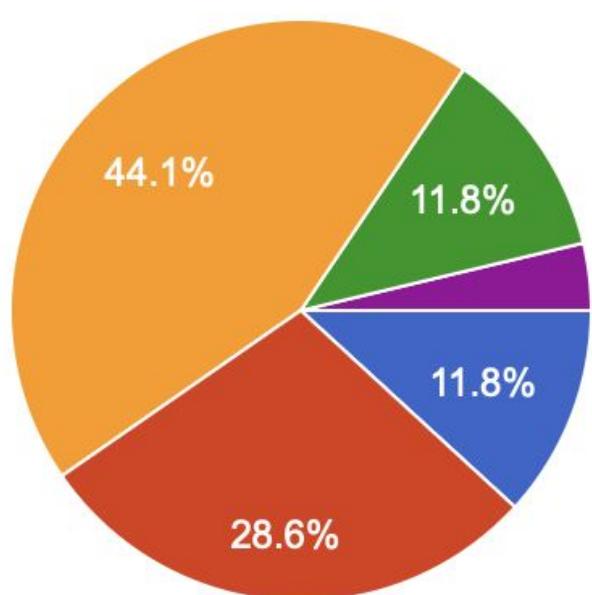


Emotional Impact of Social Media

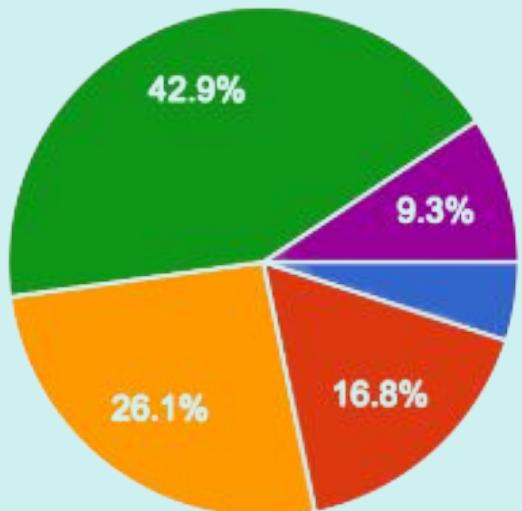
Nearly 85% of people said that social media content affects their moods and emotions. Many mentioned feeling envy, sadness, or frustration after scrolling, especially due to fake or exaggerated portrayals by influencers



- Always
- Often
- Sometimes
- Rarely
- Never



Algorithmic Influence



Around 90% of respondents believe social media algorithms mostly show them content they already agree with. While that keeps them engaged, it also creates echo chambers, where people repeatedly see the same perspectives and rarely encounter opposing or factual information.

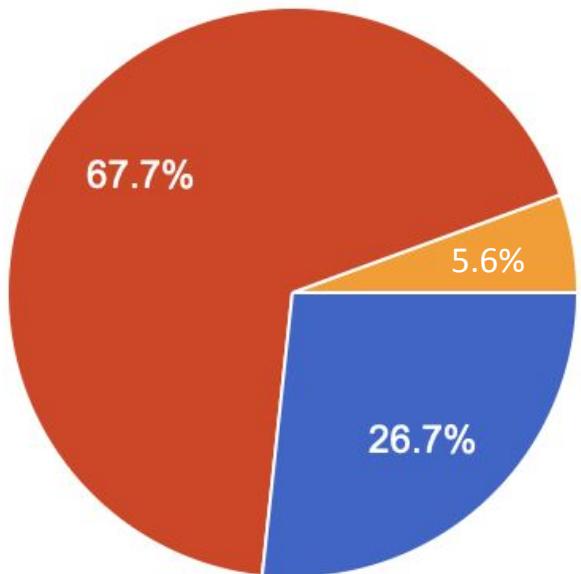
- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree



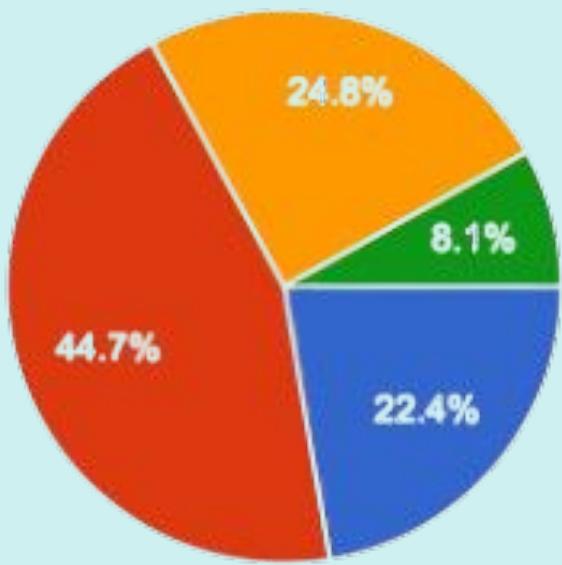
Debates and Fan Wars

Nearly 85% of people said that social media content affects their moods and emotions. Many mentioned feeling envy, sadness, or frustration after scrolling, especially due to fake or exaggerated portrayals by influencers

- I feel personally hurt or upset and defend them actively on social media
- I remain neutral and research to understand the situation
- I immediately stop consuming their work



If Likes and Views Were Hidden



When asked what would happen if likes and view counts were hidden, 44.7% said they would focus more on genuine content, 22.4% said they'd lose interest, and 8% said they'd post more honestly. This shows how much social validation affects how people interact online.

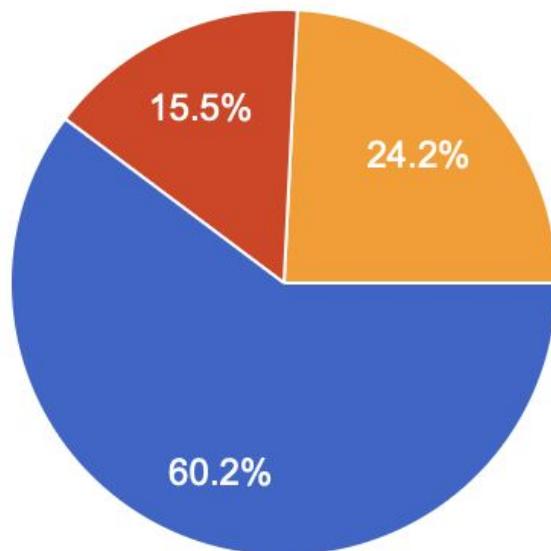
- I'd post and scroll the same way
- I'd focus more on real content
- I'd lose interest
- I'd feel more comfortable posting honestly

Truth Filters and Entertainment Bias

Around 30% of people said they wouldn't enable a “truth filter” even if given the option or they weren't sure about it. This suggests that for some, entertainment matters more than truth, which makes combating misinformation even harder.



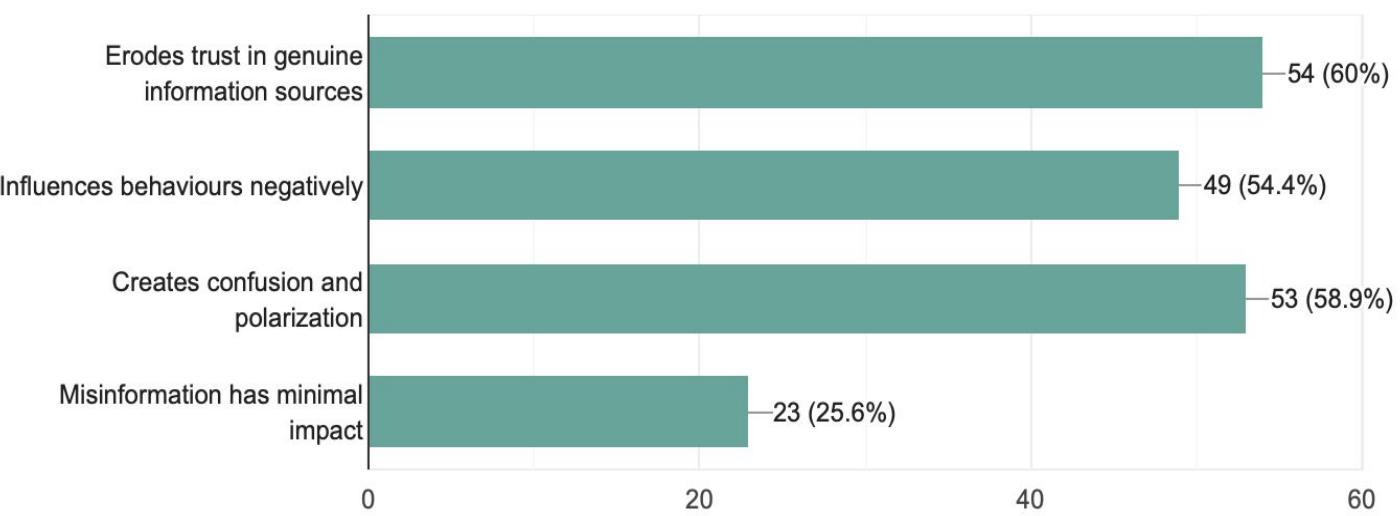
- Yes
- No
- Maybe



The Damage Misinformation Causes



About 80% of people believe that misinformation leads to confusion, polarization, and loss of trust in real news sources. Only a small group felt it doesn't have much impact – but the majority clearly see misinformation as a serious problem.

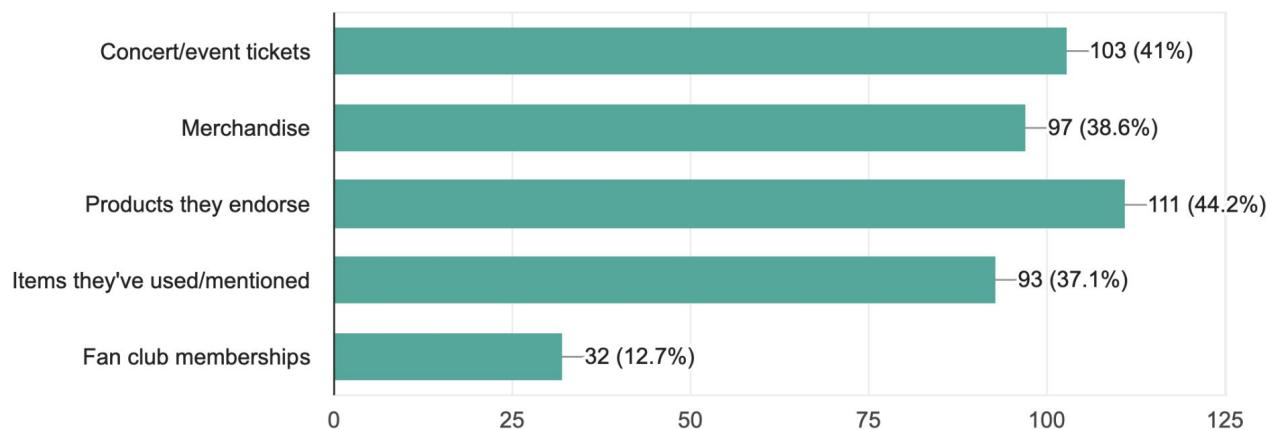


Trust Levels in Social Media Information and News

About half of the respondents admitted to buying products, tickets, or merchandise endorsed by influencers. While buying concert/event tickets or fan merchandise is harmless but the consistent use of products they endorse gives them unprecedented control over their follower's choices and preferences.

What have you purchased related to your favourite celebrity?

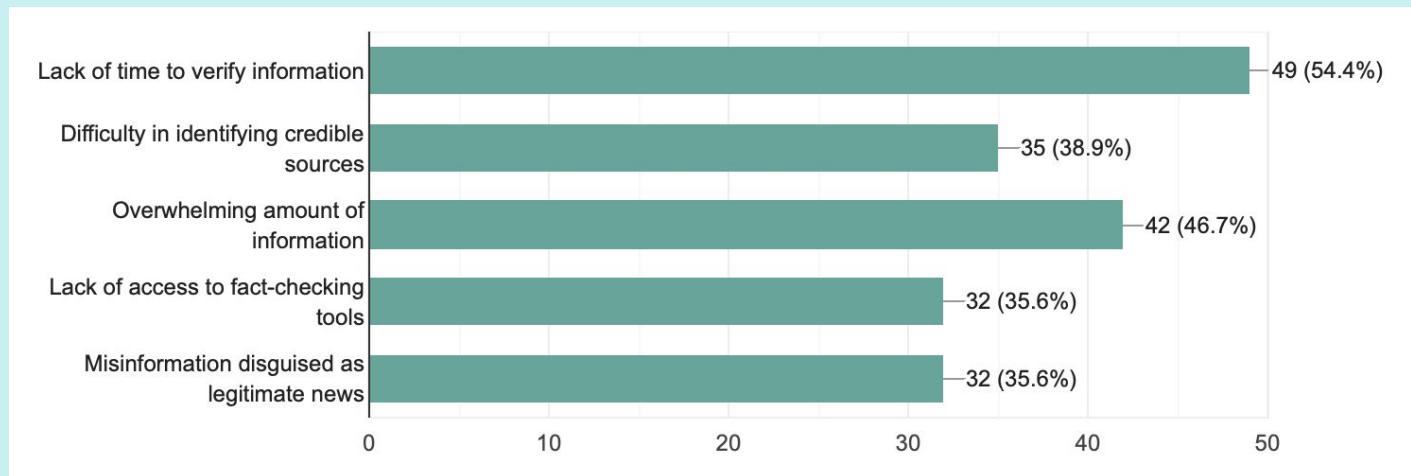
251 responses



The Time Factor



The relentless stream of news and information often overwhelms audiences, preventing them from processing issues in depth. Some argue that this oversaturation is not accidental but rather a deliberate tactic used by certain agencies to divert public focus and control narratives.

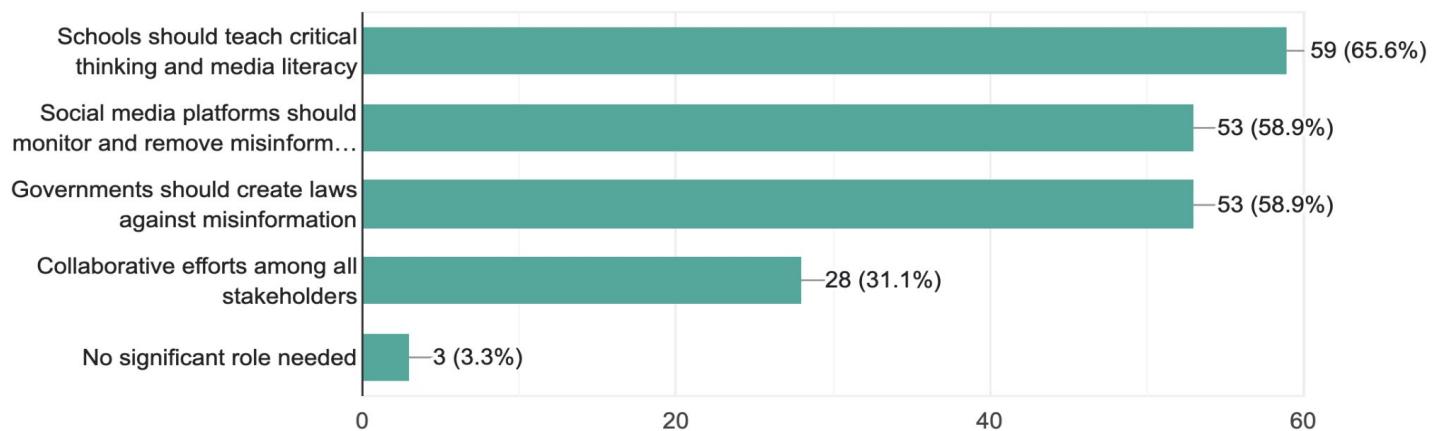


📣 What People Think Should Be Done

Most respondents agreed that schools should teach media literacy and critical thinking, social media platforms should monitor false information, and governments should introduce stronger laws to curb misinformation. People clearly want accountability at all levels.

In your opinion, what roles should schools, social media platforms, and governments play in promoting media literacy?

90 responses



3.3 Current Developments in the domain

Analysis of recent academic studies and national reports reveals a critical global gap between high media consumption and low critical literacy skills, underscoring the urgency for systemic educational intervention. The key findings from surveys and experimental research across different demographics and countries are summarized below.

Media Consumption, Trust, and Misinformation Exposure

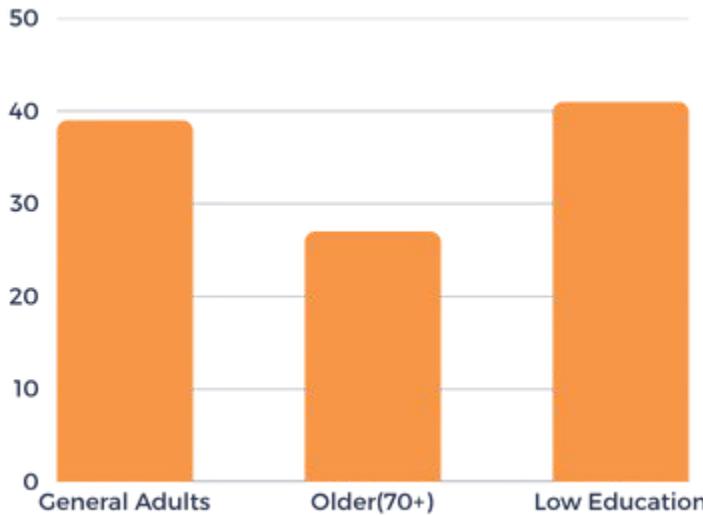


Study	Key Consumption/Exposure Findings	Media Trust/Concerns
<u>Australian Adult Media Literacy (2024)</u>	Social media is the most used media format (94% weekly use), surpassing traditional TV (80%). Adults use an average of 5 social media platforms weekly.	47% of adults encountered misinformation online in the past week. Trust is lowest in social media (15% don't trust at all). 80% want action on the spread of misinformation.
<u>WhatsApp Content Analysis (India, Indonesia, Colombia)</u>	Total of 1,391 viral messages analyzed from 401 groups. Misinformation is common: India (26%), Indonesia (30.5%), Colombia (10.5%). Approximately 50% of misinformation items were videos.	Misinformation is tailored to local contexts: India is driven by political/religious narratives (pro-BJP, anti-Muslim); Colombia by political misinformation and fear-inducing alerts; Indonesia by health misinformation and emotional religious posts.
<u>University Student Media Literacy (Spain)</u>	Students consume news mainly through social media (highest usage), followed by television and online newspapers.	Students perceive traditional sources (radio/print) as more trustworthy than digital platforms. Most students do not feel fully equipped to verify information or handle the daily volume of media they encounter.



ONLINE SURVEY

3.4 Media Literacy Gaps

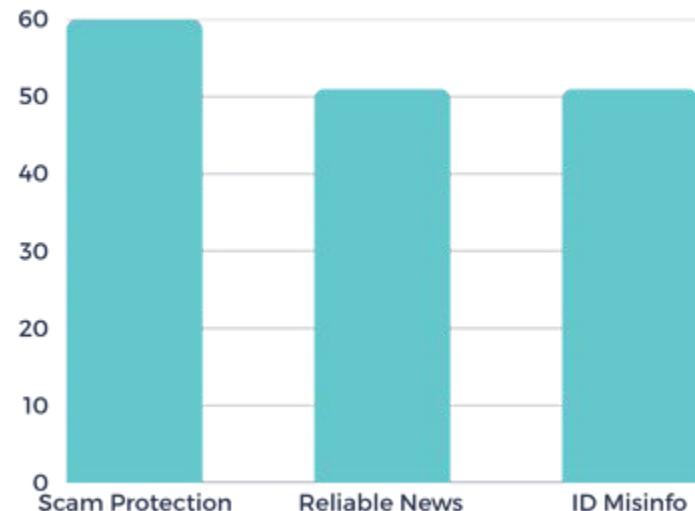


Low Confidence in Media Abilities

In Australia, less than half of adults are confident they can perform basic media tasks. Specifically, **only 39% are confident checking if information found online is true**. Older adults (Aged 70+, 73% low confidence) and those with low education (59% low confidence) showed the lowest confidence levels.

Overwhelming Demand for Education:

Australians show strong support for media literacy being taught, with **84% supporting school-based programs** and **82% supporting adult programs**. Their top learning priorities include: Protection from scams/predators (**60%**), Finding reliable news (**51%**), Identifying misinformation (**51%**).



Gap in Education

A survey of university students found only a minority had heard of "media literacy," and **very few reported it being taught in university courses**.

Ineffectiveness of Current Fact-Checking

The WhatsApp study demonstrated that **within-group fact-checking is almost absent** (only one correction observed in India and one in Indonesia). Many viral misinformation items continued to circulate even after being externally debunked.

3.5 Efficacy of Bias Detection Interventions



Experimental studies on teaching media bias awareness provide quantitative evidence on the most effective methods for intervention:

- **Superiority of Phrasal Highlighting:** Highlighting specific biased phrases within a text was found to be the most effective intervention for teaching bias detection, superior to highlighting entire sentences (effect size $p<.001$). This suggests granular, word-level feedback is optimal.
- **Counterproductive Interventions:** Highlighting politically charged words or phrases actively reduced participants' accuracy in detecting general linguistic bias ($p=.042$). This effect may be due to triggering motivated reasoning rather than objective textual analysis.
- **Viability of AI Tools:** While human-annotated labels were more effective for teaching bias detection, AI-generated labels still produced a significant improvement in bias awareness compared to a control group ($d=0.23$ vs. $d=0.42$ for human labels). This demonstrates the viability of scalable, automated tools for public media literacy.
- **Political Bias in Detection:** The learning effects of interventions were generally independent of political ideology, but more conservative participants were generally less accurate in bias detection overall ($p=.011$).



4 Proposed Solution

A Four-Pillar Strategy for a Media Resilient Society

This section outlines our multi-faceted approach to addressing the complex challenges of misinformation, media sensationalism, and uncritical consumption in the digital age. Our strategy is built upon four interconnected pillars, each designed to foster a more informed, critical, and accountable digital ecosystem. By integrating technological innovation with societal reforms, robust educational initiatives, and thoughtful governmental policies, we aim to create enduring positive change and empower citizens.

4.1 Tech Driven-Solutions

4.2 Community & Behavioral Shifts

4.3 Empowering Through Education

4.4 Policy & Regulatory Frameworks





4.1 Tech driven solutions

4.1.1 Detailed Description of the Solution

Prototype Overview

4.1.2

4.1.3

System Architecture

Implementation Overview

4.1.4

4.1.5

Philosophy & Goals



Detailed description of solution



The solution is a web-based platform that connects the general public with official government fact-checking channels, primarily the Press Information Bureau (PIB) of India. The website empowers users to report suspicious content, track verification status, access trusted news, evaluate source reliability, and participate in crowdsourced detection of viral misinformation.



In a world where misinformation spreads faster than truth, the ability to verify is no longer optional. It is our greatest defense.

4.11 Technical Approach

1

Fact Checker with PIB Verification and Notification

This is the primary feature of the platform. Users can submit any doubtful news, link, text, or screenshot that they want verified. Once submitted, the system assigns a unique Claim ID and forwards the content to PIB Fact Check. The verification status is continuously tracked. When PIB responds with an official verdict, the system updates the claim status and notifies the user.

2

Source Check System for Credibility Analysis

Many fake news posts come from unknown, newly created, or unreliable websites. This feature performs a credibility check of the source before users believe or share content. The system analyzes the website domain, checks whether a legitimate author or organization is present, and flags potentially harmful or deceptive sources.

3

Trusted Verified News Section

This section acts as a safe information hub. It contains only government-verified and platform-verified information, categorized into topics like Health, Politics, Crimes, and Public Welfare. Each verified post includes a small explanation of why it is true or false, with links to official sources.

4

Breaking News Verification through Public Signals

When breaking news appears on social media, users often get confused and lack reliable checks. This feature allows the community to participate in identifying risky information by voting on claims. If a lot of users upvote a claim as suspicious, the system prioritizes it and forwards it faster for verification. If users downvote a claim, it is marked as less critical.

4.12 Website Prototype - [Link](#)

Code Repository - [Link](#)



A screenshot of a web application titled "Verify News Authenticity". It shows a form where a user has selected "YouTube" as the social media platform and uploaded a screenshot. A progress bar indicates the process: "C: Analyzing...", "D: Detecting Labels in the image...", "E: Analysing the Labels...", and "F: Checking the Source...". To the right, a notifications box shows a completed report for Facebook from 02/03/2023 at 9:43:55 PM, with the message "Report sent to PIB for verification".

News Verifier

This feature enables users to verify the authenticity of online news. Users can upload screenshots of any suspicious social media post or article. This module extracts the key data and uploads it to the PIB fact checker.

Verified News Feed

This feature provides a feed of all trending news which has been verified through the PIB fact checker to provide users with a reliable source of information accessible via a user friendly interface.

A screenshot of a web application titled "Trending Verified Feed". It displays two news items: "Government Announces New Digital India Initiative" (verified by Twitter/X and PIB Official, posted 2 hours ago, 125K views) and "Climate Summit Reaches Historic Agreement on Emissions" (verified by Facebook and UN Climate, posted 5 hours ago, 89K views).

A screenshot of a web application titled "Report Fake News". It shows a form with fields for "Platform" (selected as "Select social media platform"), "Source Name" (name of the account or page), "Profile/Post URL" (example.com/post/12345), and "Why is this post incorrect?" (a text area with placeholder text). There is also a note to "Be specific and provide evidence if possible". At the bottom is a "Submit Report" button.

User Report Portal

This feature promotes community participation by enabling users to report suspected fake news. The system logs the report in the database, assigns a unique id to it and forwards it to fact checking authorities.

Public Opinion Feed

This is a feed of trending news items yet to be verified. Users can vote and discuss on the validity of any particular news topic. This feature aims to promote community engagement regarding this problem.

A screenshot of a web application titled "Breaking News". It shows two news items: "Major Tech Company Announces Breakthrough in Quantum Computing" (15 minutes ago, verified by Twitter/X, Tech News Daily) and "Government to Implement New Digital Currency Policy" (32 minutes ago, verified by Facebook, Financial Express). Each news item has a "True News" and "Fake News" voting button.

4.13 SYSTEM ARCHITECTURE

User Interaction Layer



- 1) Users submit different types of content(text, links, images, or videos) for verification.
- 2) The system automatically validates input format and generates a unique Claim ID.
- 3) Initial claim data (type, timestamp, user info) is logged and marked as Pending Verification.

Source Verification Layer



- 1) The system examines the domain, author profile, and publication history of the content.
- 2) Credibility scoring is performed using stored datasets of trusted and unverified sources.
- 3) Suspicious or unreliable origins are flagged for additional scrutiny before proceeding.

PIB Verification & Research Layer



- 1) Verified claims are sent to the PIB Fact Check API for official verification.
- 2) In parallel, an internal research module cross-checks data from reputed sources.
- 3) NLP and similarity models compare the claim against known misinformation databases.

Result Processing Layer



- 1) PIB or internal validation results are analyzed and classified as True, False, or Misleading.
- 2) The claim record is updated in the main database along with confidence and timestamp.
- 3) A verification summary is generated for display and audit tracking.

Notification & Verified Section Layer



- 1) Users are notified instantly through notification in notification bar.
- 2) Verified claims are published and displayed in the “Trusted Feed” section.
- 3) The verified entries are archived for future references and analytics reporting.

4.14 Implementation and Workplan:



01.

**Claim
Submission**

02.

**Source
Credibility
Analysis**

03.

**Verified
News
Repository**

04.

**Continuous
Monitoring**

Claim Submission: Develop a system where users can submit suspicious news, links, or screenshots, automatically assign unique IDs, store them in a secure database, and forward claims to PIB Fact Check with instant user notifications.

Source Analysis: Implement a credibility module to evaluate content origins, analyzing domain age, authorship, and historical reliability, flagging sources that are potentially misleading or untrustworthy.

Verified Hub: Create a centralized platform to organize verified news by categories, providing clear explanations, official references, and easy navigation for users seeking accurate information.

Monitoring: Deploy real-time monitoring tools and analytics dashboards to track emerging misinformation trends, prioritize verification efforts, and continuously improve the system's accuracy and responsiveness.

Tools & Technology

1. Frontend & UI:

React.js with Tailwind CSS/Material UI for a responsive and modern interface; Axios/Fetch API for seamless communication with the backend.

2. Backend & Security:

Node.js with Express.js for APIs, JWT for authentication, and Bcrypt for secure password management.

3. Database & Caching:

MySQL/PostgreSQL for storing user data, claims, and verification status; Redis for optional caching and faster access to verified content.

4. Real-Time & Interaction:

Socket.io/WebSockets for live claim updates, notifications, and community voting.

5. Deployment & Hosting:

Docker for containerization; AWS/Google Cloud/Azure for scalable hosting; Git/GitHub for version control.

6. Analytics & Monitoring:

Google Analytics/Mixpanel for user insights; Prometheus/Grafana for performance tracking and system logs.

4.15 Philosophy and Goals



This pillar lays the **foundational framework for a digitally resilient society**, combining **technology and education** to build a robust “human firewall.” By **embedding digital literacy into schools, public outreach, and platform tools**—including fact-checking, source verification, and trusted news feeds—we equip citizens to **analyze, verify, and respond to misinformation**, fostering a culture of critical thinking and informed decision-making.

Our Strategic Approach

Our Vision

To build a society where **truth guides decisions rather than misinformation**, enabled by **technology-powered verification and community awareness tools**. Our vision is a future where every citizen can **critically assess, verify, and trust information**, leveraging the digital technology available to us.

Our Mission

Our mission is to **integrate technology and transparency** to create a reliable, user-driven fact-checking ecosystem that strengthens digital trust and combats misinformation at its roots.

1. **Public Participation:** Users submit content for verification through the Fact Checker with real-time PIB updates.
2. **Source Awareness:** Source Credibility Analysis highlights trustworthy websites and authors.
3. **Verified News Access:** Trusted News Section provides clear, categorized, government-verified information.
4. **Community Vigilance:** Public Signal System lets users flag and vote on suspicious content.



Detailed description of solution



The proposed solution mainly focuses on social reforms and public awareness to reduce the spread of misinformation and biased media content.

Rather than depending completely on technology, this approach empowers people to think critically, verify information, and become responsible digital citizens.

It aims to build a culture of awareness, truth, and accountability through education, campaigns, and collaboration with local communities.



A community-centric strategy to foster a culture of truth and empower responsible digital citizenship from the ground up.

4.21 Social Reforms

1

Public Awareness and Educational Campaigns

To effectively combat misinformation, we will conduct comprehensive awareness drives in public areas, teaching people how to identify false news, edited images, and misleading headlines. These campaigns will be unified by simple, memorable slogans like “Think Before You Share” and “Check the Source” to ensure the message resonates across all age groups. To maximize reach and ensure better understanding in both rural and urban areas, we will distribute leaflets, posters, and short videos in various regional languages.

2

Involvement of NGOs and Social Organisations

NGOs can play a major role by organising workshops, street plays, and group sessions about responsible media usage. They are particularly vital in helping reach people in remote areas who may not have access to digital tools. To further scale this effort, community volunteers or “Digital Truth Ambassadors” can be trained by these organizations to guide others in verifying information.

3

Collaboration with Local Leaders and Journalists

Local leaders, teachers, and journalists can positively influence people by spreading verified news and actively discouraging rumours. This effort can be supported by conducting panel discussions, radio talks, and open forums where experts explain how misinformation spreads. To further embed this practice, local newspapers and media houses should be encouraged to publish weekly fact-check columns or awareness stories.

4.22 Societal Reforms: Philosophy and Goals



This implementation pillar activates our entire strategy at the grassroots level. It's the 'last mile' that carries our educational and policy goals directly into communities and daily life.

While technology provides the tools and governance provides the rules, this societal implementation is what builds the *will*—the shared social norm to use them. It transforms the theory of our Education pillar into real-world practice by empowering NGOs and local leaders. This is not just an awareness campaign; it is the long-term, community led action that will make our vision for a truthful digital society self sustaining.

Our Strategic Approach

Our Vision

To build a society where responsible digital citizenship is a deeply-ingrained cultural value, not just an individual skill. We aim to foster a vibrant ecosystem where communities, powered by local leaders, NGOs, and "Digital Truth Ambassadors," become the primary, self-sustaining defense against misinformation. Our vision is to create an environment where grassroots action and peer-to-peer accountability are paramount, making critical thinking an instinctive social norm that empowers citizens to value truth over popularity.

Our Mission

Our mission is to build an informed and responsible society by promoting truth and awareness at a grassroots level. We will:

1. Launch "Think Before You Share" awareness campaigns in schools, colleges, and public areas, using multilingual posters, slogans, and videos.
2. Partner with NGOs and NSS to conduct workshops and street plays on responsible media use, ensuring we reach remote and rural populations.
3. Train a volunteer network of "Digital Truth Ambassadors" to guide their local communities in verifying information and identifying misinformation.



Detailed description of solution



This solution pillar focuses on long-term, proactive empowerment by building a "human firewall" against misinformation. Instead of just reacting to false content, this strategy aims to equip every citizen with the foundational skills to identify, evaluate, and reject it.

It's a ground-up approach, starting with the formal integration of digital literacy into school curricula and extending to broad-based public training. By fostering critical thinking, we can shift the default behavior from blind acceptance and impulsive sharing to a more questioning and analytical mindset.



*Building a human firewall:
Empowering every citizen with
the critical thinking skills to
defend against
misinformation.*

4.31 Multi-Layered Educational Strategy

1

Curriculum & Educator Integration

The core of this solution is to integrate mandatory digital literacy modules into the national school curriculum. This includes age-appropriate lessons on how to identify sophisticated threats like deep-fakes and algorithmic bias, not just basic fake news. To ensure this is effective, a "train-the-trainer" program will be launched to provide all teachers with the necessary skills and resources to teach these critical new subjects confidently.

2

Public Training & Skill Building

To reach the wider public, we will launch a series of accessible workshops, webinars, and hackathons. These programs will be designed to train citizens in practical, hands-on skills like fact-checking, reverse image searching, and credible source evaluation. Dedicated critical thinking modules will be offered to encourage a culture of questioning and analysis, helping individuals understand the psychological tactics used to spread misinformation.

3

Community-Led Awareness Campaigns

To amplify these efforts, we will partner with established college community networks like the NSS (National Service Scheme). These groups will be empowered to run local awareness drives that promote the use of independent, verified fact-checking websites. This community-first approach helps build trust and ensures the message is delivered by familiar, credible voices at a grassroots level.

4.3.2 Education & Literacy Pillar: Philosophy and Goals

This pillar is the proactive, long term foundation for a resilient digital society. While other solutions focus on regulation and technology, this one builds the "human firewall." It is a ground-up investment in our most powerful asset: the critical thinking of our citizens.

By embedding digital literacy into the core of our educational system and community outreach, we are inoculating society against disinformation. This is not just a program; it is a cultural shift to create a skeptical, analytical, and empowered citizenry.



Our Strategic Approach

Our Vision

To build a society where information empowers rather than misleads, and critical thinking is an instinctive reflex for all. We aim for a future where citizens, from students to elders, value truth over sensationalism and are equipped to question, analyze, and verify. We envision a space where education acts as the primary, self-sustaining defense against the spread of disinformation.

Our Mission

Our mission is to build this critical-thinking foundation through its **key features and functions**. We will:

1. **Mandate** a "Digital Literacy Curriculum" in all schools, focusing on identifying deepfakes, bias, and false news, supported by a "Train-the-Trainer" program for all educators.
2. **Launch** accessible public awareness drives (workshops, webinars) using simple slogans like "Think Before You Share," with multi-lingual materials for both rural and urban areas.
3. **Empower** grassroots networks by partnering with NGOs and NSS, and training "Digital Truth Ambassadors" to lead local verification efforts and reach remote populations.



Implementation and Workplan: Education & Societal Reforms



01.

**Awareness and
Understanding**

02.

**Educational
Integration**

03.

**Community
Engagement**

04.

**Monitoring &
Sustainability**

This phase focuses on creating a structured plan to promote media literacy through consultation with educators, media experts, and social organizations to address misinformation and fake news

Educational modules, training programs, and awareness campaigns .This stage aims to equip individuals with critical thinking skills, fact-checking techniques, and responsible digital behavior.

The program will be extended to local communities through NGOs, youth groups, and media networks. Interactive workshops, digital campaigns, and social awareness drives will ensure active participation

Regular assessments and monitoring systems will be established to measure the program's effectiveness. Campaigns, improvements, and feedback mechanisms will help maintain the long-term success . media literacy initiatives.

Key Stakeholders & Responsibilities

1. Introduce media literacy programs in schools and communities to teach critical thinking, fact-checking, and responsible digital use.
2. Train educators and community leaders to help citizens identify misinformation and practice safe, ethical online behavior.
3. Partner with NGOs and local media to create and distribute awareness materials (videos, posters) in regional languages for both rural and urban areas.

Detailed description of solution



The proposed solution is a comprehensive Digital Media Governance Framework, a multi-pronged regulatory and educational initiative designed to create a safer, more transparent, and more critical media ecosystem.

This framework moves beyond a single app or website. It establishes a new set of national standards through three core legislative pillars that work together to hold platforms accountable, create transparency for users, and empower citizens with the skills to navigate the modern digital world.

give me the replacement



A multi-pronged framework to create accountability, transparency, and empowerment across the entire digital ecosystem.

4.4.1 Governance Framework: Blueprint for Responsibility

1

The 'Crisis Escalation' Act (Accountability in Crisis)

This policy addresses the problem of sensationalism and its effect on public fear. It mandates new responsibilities for media outlets and digital platforms during a declared public crisis (e.g., natural disaster, terrorist attack). It imposes immediate fines for broadcasting unverified, sensational information and legally requires platforms to prioritize and feature official, verified information sources (like the PIB Fact Check or disaster management portals) on their homepages.

2

The 'Digital Endorsement' Transparency Law

This law directly targets the "Idolization" problem and its impact on consumer choices. It mandates clear, standardized, and machine-readable disclosures for all paid endorsements, moving beyond easily-missed hashtags. It requires creators and platforms to use a standardized, platform-native tool (like Instagram's "Paid Partnership" label) that cannot be hidden, creating clear accountability.

3

The 'National Media Literacy Mandate'

This policy tackles the root-cause issues of "Literacy" and "Bias" by integrating digital literacy as a core, mandatory subject in the national public school curriculum. The government's role is to fund the development and free distribution of standardized educational tools, such as the "Media Deconstruction" curriculum and the "Verification Gauntlet" app, ensuring all citizens receive a baseline level of critical thinking education.

4.4.2 Governance Pillar: Framework Philosophy and Goals



The implementation of this framework is the foundational bedrock for our entire project. It establishes the new, permanent rules for the digital ecosystem.

By creating legal guardrails for accountability and mandating a national baseline for education, this framework provides the stability needed for our other technological and societal solutions to succeed. It is not just a policy; it is the comprehensive, long-term structural reform that makes a resilient, critical, and truthful digital society possible.

Our Strategic Approach

Our Vision

To build a digital society where information empowers rather than misleads, and accountability is built into the system. We aim for an ecosystem where all advertising is transparent, public safety is prioritized over sensationalism, and critical thinking is a core national value embedded in every student's education, creating a space where truth and value overcome popularity.

Our Mission

Our mission is to build and enforce this framework through its **key features and functions**. We will:

1. **Mandate** a "Standardized Disclosure Tool" on all social platforms, making paid endorsements and influencer advertising 100% transparent.
2. **Enforce** an "Official Source Prioritization Mandate" (like the PIB Fact Check) during crises to curb panic and sensationalism.
3. **Launch** the "National Media Literacy Curriculum" and its "Verification Gauntlet" app in schools nationwide, providing the tools to build a critical, informed, and resilient citizenry.



5.1 Results and Discussion



Our survey clearly indicates the scale of misinformation available and the urgent need for media literacy. Around 88% people admit that their primary mode of news as social media and going on it will increase. Rapid leap in AI technology also increases hurdles in the age of social media, with over half the people in the survey admitting that they had fallen prey to misinformation before, highlighting the need for critical media evaluation skills.

5.2 Importance and Benefits of the Solution

The timeless saying “Prevention is better than cure” captures the essence of our project’s goal, to address misinformation before it takes root. We are trying to build a society capable of critical thinking, one that does not get influenced and manipulated by external agendas.

Key benefits include:

- Empowering individuals to identify biases and false narratives independently
- Encouraging transparency and accountability across media platforms through the governance framework
- Fostering critical thinking and informed citizenship, which strengthens democracy



5.3 Expected Outcomes



Responsible Digital Behavior



People will develop more robust critical thinking and analytical skills, thus being able to clearly identify misinformation, recognize bias, and check sources before sharing content.

1

2

Effective Verification

People will develop more robust critical thinking and analytical skills, thus being able to clearly identify misinformation, recognize bias, and check sources before sharing content.



Enhanced Media Literacy

3

People will develop more robust critical thinking and analytical skills, thus being able to clearly identify misinformation, recognize bias, and check sources before sharing content.



5



4

The suggested governance framework will increase institutional accountability, regulate misinformation, and make media operations more clear with acts like the Crisis Escalation Act and Digital Endorsement Law.



Improved Social Trust

Improved Government and Policy

With time, such reduction in misinformation and sensationalism may well restore confidence in the more credible media sources, thus fostering social bonds and psychological stability among the users of digital media.

6 Constraints & Barriers in Implementing Media Literacy and Awareness in India

Limited Infrastructure and Access

Many schools, especially in rural areas, lack adequate computer facilities, stable internet, and updated teaching resources. Similarly, low-income communities have limited access to smartphones and digital verification tools, making media literacy training and fact-checking difficult.



Insufficient Training and Awareness

A large number of teachers and facilitators are not adequately trained in digital education or critical thinking. Public awareness about media literacy is also low, resulting in poor participation in campaigns and educational programmes.

Funding and Coordination Challenges

NGOs, community groups, and media organisations often depend on temporary grants or donations, limiting the continuity of awareness initiatives. Coordination between government bodies, media houses, and NGOs is weak, resulting in fragmented and short-term efforts.



Policy and Trust Barriers

Introducing new media-related policies faces bureaucratic delays, and strong regulation can sometimes be perceived as a threat to free speech. Additionally, many citizens distrust government or platform-based fact-checking services, fearing bias or political influence.



7 Conclusion

We, Group 22, conclude that the "**Media Literacy & Awareness**" project successfully diagnosed the urgent societal risks posed by misinformation, sensationalism, and low critical literacy in the digital era. We have proposed a robust, multi-pillar solution to address this problem.

Confirmed Crisis and Data Validation



We determined that while media plays a significant role in shaping how people think and act, there is still a need for media literacy in the society. We identified a major literacy gap: while 88% rely on social media for news, half admit sharing unverified content, and only 30.7% use trusted fact-checking tools.

Mandate for Systemic Accountability



We concluded that reacting to false content alone is insufficient—systemic reform is essential. Our Governance Framework enforces transparency and accountability through key legal measures: the '**Crisis Escalation Act**' penalizes unverified crisis reporting, the '**Digital Endorsement Transparency Law**' mandates disclosure of paid content, and the '**National Media Literacy Mandate**' makes digital literacy compulsory to build lasting resistance to misinformation.

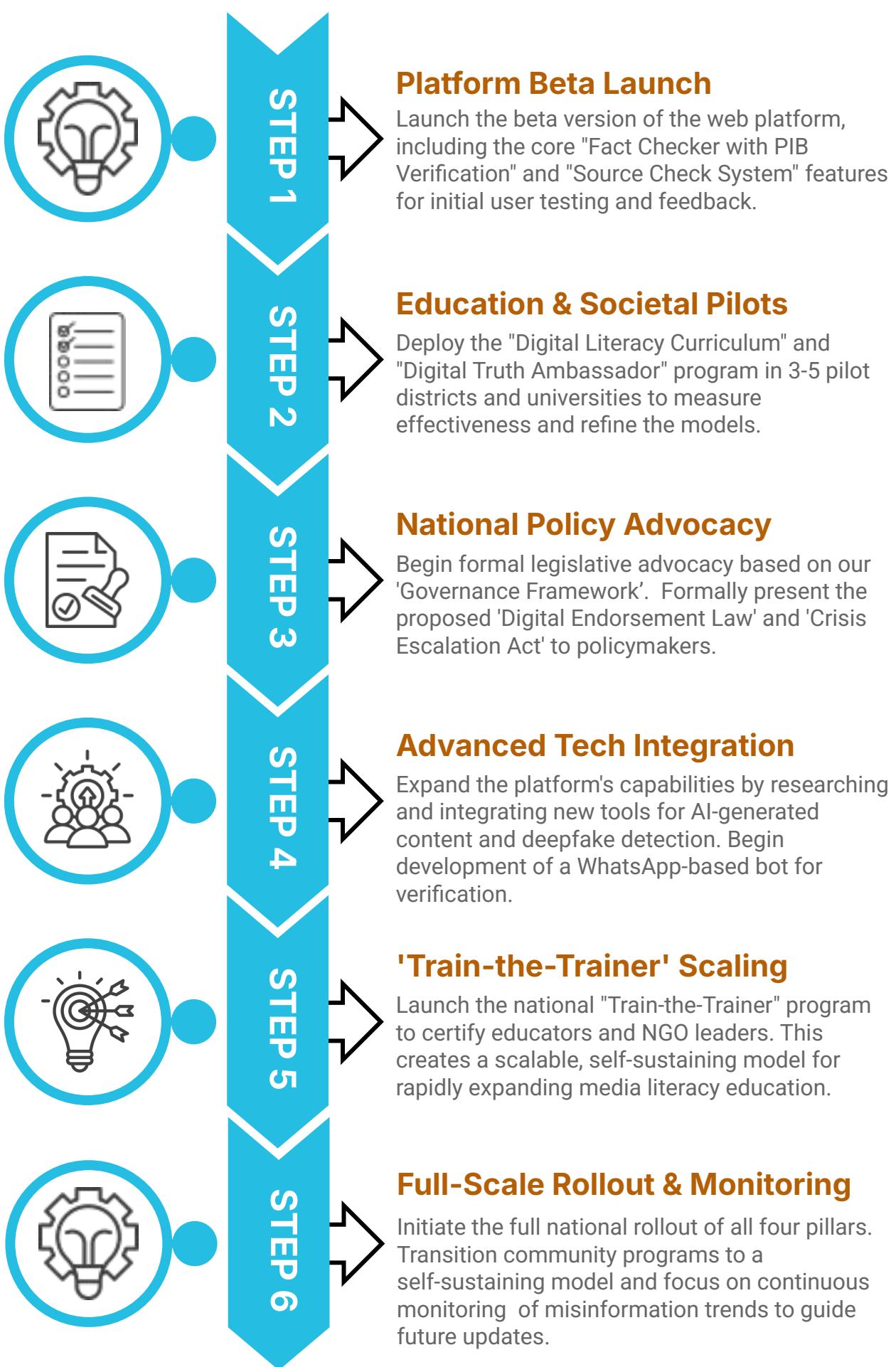
Empowerment through technology & Education

Our solution equips citizens with both tools and skills. The web-based platform links users to official verification channels like the Press Information Bureau (PIB), enhancing digital trust through transparency. It enables users to submit content for verification, track its status, and assess credibility via a Source Check System. In the long term, integrating mandatory media literacy modules into education builds a "**human firewall**," empowering citizens to critically analyze and combat misinformation.

Our Vision for a Resilient Society

Ultimately, we concluded that the successful synergy of these four pillars—Policy, Technology, Education, and Societal Reforms—will create a media-resilient society.

8 Plan Of Action: Our Next Steps



9) References

- 01 Press Information Bureau – Fact Checking Initiatives : [Link](#)
- 02 Human Dynamics Journal – Information Behavior : [Link](#)
- 03 NCBI – Media Interventions and Public Health : [Link](#)
- 04 Boston University to Counter Disinformation : [Link](#)
- 05 Australian Media Literacy Report – AML 2024 : [Link](#)
- 06 Science Direct and Digital Competencies : [Link](#)
- 07 World Economic Forum Rethinking Media Literacy : [Link](#)
- 08 UNESCO Global Media and Information Literacy : [Link](#)
- 09 NASBE Policy to Foster K–12 Media Literacy : [Link](#)
- 10 Role of Media in the Governance Reform Agenda : [Link](#)
- 11 Media Literacy & Information Behavior (Overview) : [Link](#)
- 12 The Media Literacy Index (European Countries) : [Link](#)
- 13 Media Literacy Skills to Counter Disinformation : [Link](#) 39



10 Contributions

1

Harsha (2023MCB1216)

- Worked on developing the social awareness based solution.
- Analyzed UNESCO Global Media and Information Literacy
- Analyzed Media Literacy Skills to Counter Disinformation
- Assisted with editing and finalizing the report



2

Rohith (2023MCB1312)

- Designed the UI and developed core frontend pages with responsive layout.
- Worked on developing the Educational Strategy
- Analyzed Press Information Bureau
- Assisted in improving report clarity and visuals.

3

Goutham (2023MCB1295)

- Worked on developing the social awareness based solution.
- Analyzed Australian Media Literacy Report
- Prepared and conducted the survey for data collection
- Supported report drafting and refinement



4

Praneeth J V (2023CSB1296)

- Implemented backend functionality and connected API with the database.
- Analyzed Human Dynamics Journal paper
- Performed analysis on survey responses
- Contributed to report drafting and formatting.

5 Ritvik (2023MCB1219)

- Worked on developing the Government Framework.
- Analyzed Science Direct and Digital Competencies
- Role of Media in the Governance Reform Agenda
- Helped with final documentation preparation



6 Viswateja (2023MCB1293)

- Worked on interactive features, navigation flow, and bug fixes.
- Analyzed NCBI – Media Interventions and Public Health
- Prepared and conducted the survey for data collection
- Helped with report organization and documentation

7 Akash (2023CEB1038)

- Worked on developing the Educational Strategy.
- Analyzed World Economic Forum Rethinking Media Literacy
- Analyzed The Media Literacy Index
- Contributed to refining the final report formatting.



8 Prathvik (2023MCB1307)

- Managed deployment, version control, and polished the final build.
- Analyzed Boston University to Counter Disinformation
- Performed analysis on survey responses
- Assisted in writing and refining the report.



9 Likhit (2023CSB1139)

- Worked on developing the Government Framework.
- Analyzed NASBE Policy to Foster K–12 Media Literacy
- Analyzed Media Literacy & Information Behavior
- Worked on content arrangement and overall report completion



Thank
You