



## Engaging Youth in Low- and Middle-Income Countries Through Chat Apps: Challenges and Opportunities for International News Organizations

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This article focuses on strategies of international news organizations (INOs) in low- and middle-income countries (LMICs). In particular, I examine the potential of smartphone platforms in LMICs to reach and connect with new, younger audiences. Insights suggest that chat apps (a) tend to attract new users, often a younger audience, and (b) are accessible for low-income semiliterate or illiterate people, as they allow for dissemination of video clips and images. However, despite identifying an increasing number of pilot studies and initiatives by INOs to harness chat apps to engage with these audiences, the article uncovers, through a systematic approach, a substantial gap in research regarding the effectiveness of these strategies.

*Keywords: mobile phone, news, chat app, mobile instant messaging, youth, young people, developing country, audience, international news organization*

Throughout media history, at least three interlinked dimensions, in addition to ownership, have had a continued impact on the distribution of global media power. These are changing market contexts, changing demographics, and technological progress. In the global race to reach hitherto untapped audiences and unlock new market segments, population-rich low- and middle-income countries (LMICs), with their growing middle classes, have become a new strategic battleground for international news organizations (INOs) looking to expand their reach. Previous research based on focus groups across the socioeconomic spectrum in five LMICs suggested that traditional international broadcasters (which will be included under the umbrella term of INO in this article) such as the BBC, CNN, France 24, and DW used to

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Date submitted: 2015–10–01

<sup>1</sup> This study was in part inspired by an earlier study conducted by the author through the Reuters Institute for the Study of Journalism, Department of Politics and International Relations, University of Oxford, in 2010–2011 (jointly funded by the Carnegie Foundation New York, BBC Global News, and France 24). The author would like to thank RISJ; Green Templeton College, Oxford, for awarding a TECT career development grant; and the University of Oxford John Fell Fund for a small grant to conduct additional focus groups and interviews in Egypt in 2011.

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be widely perceived by audiences as news providers for opinion leaders (Geniets, 2013). With improving communications infrastructure, ameliorated education levels, and increasingly affordable new technologies in many LMICs, the accessibility of these traditional INOs has changed to a tough market context characterized by increased international competition, liberalized local markets with strong vernacular news media outlets, and fragmented distribution channels. To adapt to this changing global news environment, traditional INOs have increasingly moved away from global language services to invest in local content.

To understand the complexity of the interplay of these new dimensions, one also needs examine the population structures of these target markets. LMIC populations generally have a large proportion of people under 30s (youth bulges). As research shows globally, a new generation of young people no longer tends to engage with traditional INOs on TV and radio but increasingly consumes news from a variety of providers on locative media, including smartphones and tablets (Adler, 2013; Cortesi & Gasser, 2015; Mitchell, Rosenstiel, & Christian, 2012; Sheller, 2015). In LMICs, young people increasingly use mobile phones and, due to a marked drop in their prices, low-end smartphones. Smartphones have thus become a medium by which INOs can reach younger audiences and can engage with increasingly socially mobile young people from lower socioeconomic backgrounds. Although news organizations' use of mobile phones in LMICs, for example through SMS-based news services, has been well documented (Büren, 2011; Van Noort & Mavhungu, 2012; Westlund, 2013), research on the use of affordable smartphones in LMICs by news audiences and citizen journalists is still young (Mills, Egglestone, Rashid, & Vääätäja, 2012; Watkins, Hjorth, & Koskinen, 2012). In this context, how can INOs leverage new technologies successfully to reach a new generation in LMICs?

If one were to go by recent global user figures, the answer would be simple: by using *mobile instant-messaging applications* (MIMs)—often simply referred to as “chat apps”—which offer a low-cost, cross-platform alternative to SMS and MMS on smartphones. Although each type of chat app is different, what MIMs such as WhatsApp have in common is that they are multimedia instant messaging applications for smartphones that allow users to send and receive (in real time) location information, images, video, audio, and text messages to individuals and groups without necessarily having to be able to read or write (Church & de Oliveira, 2013). They also tend to be more cost efficient than traditional SMS or MMS communication. While it would undoubtedly be interesting to examine how news consumption by semiliterate or illiterate audiences in LMICs via chat apps compares to their news consumption via social media such as Twitter or Facebook or news alerts by SMS, the focus of this article is on MIMs alone.

Indeed, since 2013 MIMs have surpassed SMS in global message volume (eMarketer, 2015), prompting many INOs and national news providers to experiment with this new technology. For example, there has been a considerable proliferation of reports and initiatives by news organizations, both national and international, regarding MIM applications such as WhatsApp, WeChat, LINE, Telegram, Snapchat, Viber, and Kik (Barot & Oren, 2015; O'Donovan, 2014).

However, hardly any academic literature has examined this topic. Although disciplines such as medicine and education have seen a number of studies on the use and impact of MIMs in their fields, a dearth remains in communications and in journalism research regarding the use of chat apps by news organizations and audiences. This article aims to highlight this gap by examining contextual factors of

smartphone ownership, usage, and audience structures in low income countries and juxtaposing them with INOs' strategies to engage new and younger audiences by means of mobile first strategies, most recently via mobile instant messaging, and the prevalent body of literature in the field of communications and journalism studies. This article thus has two parts: It focuses on the potential of MIMs used by INOs in LMICs to reach out to and connect with new and younger audiences, and it identifies a gap in research to deliver evidence for this potential of MIMs. Despite their increasing number, experiments by national news organizations in LMICs with chat apps could not be included in this study, as they lie beyond of the scope of this article.

### **Method**

The findings presented in this article are based on two in-depth interviews with digital journalism representatives of two INOs conducted in 2015, and a systematic review of media and communications studies literature concerning mobile instant messaging applications used for news.

Details of the search strategy applied to this systematic review will be elaborated in the section "Findings From a Systematic Review."

The interviews have been informed by preliminary findings of research conducted in 2010 and 2011 consisting of 44 representative focus groups in Kenya, Senegal, Egypt, India, and Pakistan and interviews with six experts of international broadcasting organizations, including CNN, BBC, VOA, Al Jazeera English, DW, and AEF. Such expert (also called "elite") interviews are tools commonly used in the social sciences to examine attitudes, visions, and views of experts in stratified systems in media and politics (Harvey, 2011; Moyser, 2006).

The two expert interviews were conducted in 2015 with a European (BBC) and an Asian (CCTV) international broadcaster each. The interviews consisted of six semistructured questions designed to prompt a discussion about the strategic use of MIM applications by INOs and how INOs can best engage with younger audiences in mid- and low-income countries.

These six questions were partly inspired by earlier interviews with six other executives from a variety of INOs conducted in 2011. These earlier interviews focused on gaining a more general picture of strategies used by international broadcasters to reach out to and engage with new, younger audiences of low socioeconomic status in developing markets. These executive interviews were intended to complement audience research on the consumption of news by INOs.

The audience research consisted of 44 representative focus groups (with a total of 220 participants) from across the socioeconomic spectrum in Kenya, Egypt, Senegal, India, and Pakistan that I conducted in 2010. For the focus group work to be representative, it was important to include in the research participants from low socioeconomic backgrounds, including illiterate participants and people living in informal settlements. To draw parallels between groups, the same discussion guide, consisting of roughly 25 semistructured questions, was used across all countries (for more detail on the methods of these earlier interviews and detailed findings of this previous data collection phase, see Geniets, 2013).

## Discussion

### ***Smartphones and Mobile-First Strategies: From Facebook and Twitter to Chat Apps?***

Sheller (2015) pointedly observed that “location, proximity, instantaneity, and sharing have all become hallmarks of news flows today” (p. 16), and with more and more young people on the move, mobile phones and tablets have become their devices of choice to access news. Ever since mobile phones and later smartphones became more mainstream, *mobile-first strategies* have become an essential part of INOs’ strategies, as the following excerpts from expert interviews illustrate:

We were just bolting websites on to radio operations and so it’s another terrible cliché, but this idea of “digital first” is something that we are trying to instill. (Executive of government-owned international broadcaster 2)

With this fast moving technical world that we inhabit, where the new ways of people not just receiving information on iPhones and iPads but also the new ways of people giving the information, so the eyewitness-sort-of mobile phone users, the Twitter users, who are witnessing stories for themselves, who are posting all that information by video into the ethersphere—it’s to be able to engage with that, verify it, and use journalistic tools to verify information, be transparent with the viewer, but to actually keep up with the fast-moving technical world so that we can ensure that we are delivering content at the kind and place of people’s choosing, so that they can get it on their television sets and on all the new platforms. And also that we can capitalize on, as it were, the conversation going on in the new media world so that we are getting the best benefit from it. (Executive of government-owned international broadcaster 3) So my sense is that more and more resources are going towards social media and certainly the ease of getting a story out on social media means that inevitably on a breaking story it’s going to be first, it’s quicker to send a tweet out than it is to even put something on a ticker in the newsroom. (Executive of a government-owned international broadcaster 4)

Initial interviews conducted with experts in 2011 revealed plans among some of the INOs to switch to mobile-first strategies in LMICs to reach younger audiences:

[The] target is now much larger in Africa than opinion leaders. We now also reach the general population, 15 plus. And regarding other sociodemographics, we don’t have a specific strategy regarding other demographics, in the general broadcasting, in the traditional broadcasting it is a bit different when you consider Internet and mobile and so on, where the usage is more by young people, or young opinion leaders. (Executive of government-owned international broadcaster 1)

The other thing that we are learning about with our digital strategy is that the website for a computer is increasingly not the way that people are coming to digital and the Internet. That almost goes back to your other project. That in Africa, most evidently in

Indonesia, people are coming to our digital propositions on a mobile device, not a plugged-in computer. You know, our mobile audience in Indonesia are about three times those for our PC desktop site. And again that's something that people read about in the industry press and you hear this kind of mobile-first trend and so on and so forth, but it's only when you see it so vividly that you start to reconfigure operations, so that things are set up in order for our content to be produced in a mobile-first kind of way. (Executive of government-owned international broadcaster 2)

While some of the experts interviewed cautioned against the trend of shifting everything "from broadcast to digital and online platforms," because of the overall composition of their global audiences, the rationale for mobile-first strategies in LMICs to reach younger audiences indeed seems plausible, given the leapfrogging of mobile technology in LMICs.

Mobile phone subscriptions in LMICs are on the rise: For example, in Sub-Saharan Africa alone, they are predicted to rise to around 930 million by the end of 2019 (Ericsson, 2014). As Avidar, Ariel, Malka, and Levy (2013) have argued in their Israeli study, smartphones offer a new way for organizations to interact and form relationships with a young public. Low-end smartphones in LMICs are continuing to drop in price (see, e.g., Kochi, 2012), with Android- or Linux-based affordable smartphones becoming more common among people from lower socioeconomic backgrounds. For example, in India plans are well under way to put a Linux-based smartphone on the market that will cost U.S.\$15 (Abbas, 2015).

Adler (2013) and Sheller (2015) rightly observe in their work that the shift of news delivery systems—which are now on demand, with young audiences consuming news increasingly via smartphones and tablets—has also, inevitably, inspired a change in the stylistic form of news, promoting short-form news, for example on Twitter and Facebook, with links to more in-depth information.

However, contrary to the social media (Twitter and Facebook) strategies mentioned by the six experts in 2011, the two additional interviews conducted with experts in 2015 seemed to imply that mobile-first strategies in future might indeed be increasingly focused on MIMs. As one expert explained, this is mainly because of their feasibility, with Twitter and Facebook being more text-based and having higher barriers to entry, as they require passwords. In LMICs, with low literacy rates, this can be problematic. In addition, their algorithms do not necessarily guarantee that a news post reaches a user's personal feed. Chat apps, by contrast, do not require passwords and reach audiences instantaneously. As one expert outlined:

One of the things we learnt was that it [WhatsApp] was proving to be a very efficient way of being able to distribute content to subscribers by getting it directly onto their phone, and they would receive it almost instantly and they would probably read it instantly. And so it was a very potent way of delivering content. (Expert interview conducted in 2015)

In addition, recent figures suggest that the use of chat apps is increasing worldwide, particularly in LMICs (McMillan, 2014). For example, WeChat (Weixin in China) reported a combined 600 million

monthly active users in August 2015 (Tencent, 2015). WhatsApp, which was acquired by Facebook in 2014, had reached a user base of 900 million users worldwide by September 2015 (Chowdhry, 2014; Guynn, 2015). (Since January 2015, WhatsApp is also available on Internet browsers via WhatsApp Web [Gander, 2015].) Meanwhile, the Japanese messaging application LINE, based on data collected between July 2010 and August 2015, has been reported as the second most profitable app worldwide (LINE, 2015), with more than 700 million users in 2015 (Eun-ji, 2015). Other apps, such as Facebook Messenger (which will not be covered in this article), have seen a similar rise in their popularity since their introduction. Given these trends, it is thus easy to see how MIM applications have become attractive tools for INOs to push out news and reach out to potential new audiences.

### ***"Pilotitis" and the Challenge of Scale***

Insights gathered from the two expert interviews in 2015 suggest that:

(a) Chat apps tend to attract new users, often from a younger audience.

It's difficult to prove but I think we certainly had in mind that—well, we know that there are many more WhatsApp users than there is our current audience] in those countries and so there's a good chance that if we then start seeding content inside of WhatsApp, it'll start reaching those people that we haven't been able to reach through our conventional broadcasts or through our website or social media sites. It's very difficult to assess that, but my instinct suggests that probably we are reaching people that we wouldn't have reached through any of our other platforms. (Expert interview conducted in 2015)

(b) The interaction between INOs and their audiences in chat apps tends to be more "personal," and mediated through personal networks.

Anecdotally we know that a lot of the subscribers are sending content we are sending to them on to their friends and contacts through WhatsApp, and a lot of people say "I sent this to all my friends on WhatsApp" or "I sent it to all the groups, to all my family members on my WhatsApp group" and things like that. (Expert interview conducted in 2015)

(c) Chat apps are accessible for low-income semiliterate and illiterate people, as they allow video clips and images to be disseminated.

Because text and images are low file sizes anyway we felt that way that we could cover as many needs as possible; so text for people who just wanted to have a quick read, audio for people who couldn't read so well, and visual also for people who didn't know the language so well but could at least understand the visual imagery to help them. (Expert interview conducted in 2015)

(d) In addition, for INOs piloting the use of chat apps, the closer interaction with their audiences can be highly beneficial for news gathering. The journalistic impact for INOs leveraging chat app networks to collect essential information is not a focus of this article, but the potential of MIMs to do so becomes clear in the description below:

We get a lot of stories and actually a lot of the messages we get back turn into stories in their own right which we feed into our main ... news desk, and so that can sometimes be leads to stories to investigate by our different teams on the ground or it could be just interesting case studies for our news programs to help illustrate the story. So sometimes we'll get programs calling the team saying "Do you have anyone in this region who has been in touch with you about this topic?" and then we'll go through our messages and see if anyone fits the bill, check if they're happy to be contacted by a program, and then we'll pass their contact details on. (Expert interview conducted in 2015)

The increasing number of MIM pilot projects in the news media sector and the large body of gray literature identified during the systematic literature search could indeed be perceived as indicative of the potential of chat apps to reach new and younger audiences globally. To give an impression of the remarkable number and variety of current and completed MIM news pilot projects, here are a few of them: the use of WeChat/Weixin by *The New York Times* to target new audiences in Asia (New York Times, 2015); the use of WeChat/Weixin by CCTV and *China Daily* in China and the use of LINE by *The Wall Street Journal* and the BBC (Barot & Oren, 2015); the use of WhatsApp and WeChat by BBC News India during the Indian elections in 2014 (Barot, 2014); the use of Mxit by BBC News South Africa to cover the elections in South Africa in 2014 (BBC, 2014); the use of WhatsApp by the BBC during the Ebola outbreak in 2014 and 2015 (Barot, 2015); the use of WhatsApp by *The Guardian* to chat live during the U.S. Republican presidential debate of December 2015 (Gabbatt, 2015); the use of Viber by BBC Nepali Service during the Nepal earthquake in 2015 (Lichterman, 2015); the use of Snapchat by CNN (and by ESPN, *National Geographic*, *Vice*, *Cosmopolitan*, Comedy Central, The Food Network, MTV, *People*, Yahoo News, and *The Daily Mail*) to promote news stories and to publicize TV and entertainment content (Stelter, 2015).

However, given the sheer number of these pilot projects, with audience figures from media and chat app companies being notoriously hard to get and with evaluations of these pilot projects (and the evidence of the success of larger scale projects) as yet in short supply, it seems that, like in other disciplines adapting to using smartphone technology (most notably in mHealth; Skoll Foundation, 2013), the news media sector, too, may be suffering from a case of acute "pilotitis": the inability to break out of pilot phase. Whether this state of affairs is due to the relative newness of the use of chat apps by news media (WhatsApp, for example, was introduced in 2009), the technical and administrative challenge to scale up from chat app pilots, or a combination of both is hard to establish.

Certainly, given these positive trends and developments, it is difficult not to get excited by the current pioneer spirit. But as a conference colleague once pointedly observed, "The plural of anecdote is anecdotes, not data." And indeed, if one were to adopt a very critical stance, despite the evident potential

of chat apps to reach new audiences, the question remains: Where is the evidence that it will work? To answer this question, I conducted a systematic search to review and analyze the existing evidence.

### ***Findings from a Systematic Review: An Evidence Gap***

In recent years, in a number of academic fields, most notably in medicine, nursing, and education, a growing body of academic studies has investigated the use of chat apps such as WhatsApp. This literature includes, for example, studies on WhatsApp use in general (Church & de Olivera, 2013; Montag et al., 2015; O'Hara, Massimi, Harper, Rubens, & Morris, 2014; Soliman & Salem, 2014), the effect of WhatsApp use on students' learning and performance (Ahad & Lim, 2014; Bere, 2012; Yeboah & Ewur, 2014), and the use of WhatsApp and other chat apps for communication and discussion among medical teams (Giordano et al., 2015; Johnston et al., 2015; Khanna, Sambandam, Gul, & Mounasamy, 2015; Wani, Rabah, AlFadil, Dewanjee, & Najmi, 2013).

Interestingly, this same trend cannot be observed in the field of media, communication, and journalism studies regarding the use of chat apps for news or studies from an audience perspective or studies from an organizational or business perspective, as a systematic review conducted for the purpose of this article uncovered.

The search strategy to identify relevant studies focused on both academic and gray (i.e., not academically peer-reviewed) literature sources with the aim to provide an exhaustive account of the evidence. Academic database searches included social sciences sources, most notably the EBSCO Communication and Mass Media Complete and the Communication Abstract databases. Gray literature sources comprised the websites of various INOs (CCTV, BBC, CNN, DW, RT, France 24, VOA, Al Jazeera), Google and Google Scholar searches, and the websites of specific foundations and journalism institutions (e.g., RISJ, the Nieman Lab, and Tow Center). The applied search used terms related to (a) chat apps and mobile messaging apps and (b) news, using the *AND* Boolean operator. I further applied forward and backward citation searches of all identified studies. Hand searches of key journals, such as the *International Journal of Communication* and *The European Journal of Communication*, were conducted too to ensure the sensitivity of the applied search strategy. A predefined set of inclusion criteria was used to identify relevant studies eligible for inclusion in the systematic review. To be included, a study had to focus on MIM applications (or chat apps), on news or journalism, on low-income countries, and on young users (up to age 35). Because the search of the databases did not return any results for these search terms in the first iteration, in the second iteration, the inclusion criteria were broadened to studies that simply mentioned MIM applications (or chat apps) and news or journalism. To be included for the systematic review, studies had to present empirical qualitative or quantitative research evidence. Commentary, opinion, and advocacy papers that were not based on empirical data collected for the purpose of the publication were excluded. The inclusion threshold of empirical research was met if the research objective, method, population, data, and analysis were described. Eligible study designs can be differentiated into three types of research: (a) descriptive qualitative and quantitative studies reporting audience data or data from journalists, (b) outcomes evaluations of initiatives to use MIM applications to push out news, and (c) systematic reviews and meta-analyses of studies of type a or b.



I initially identified 754 studies ( $N = 754$ ) through this search and screened all the records. Of all these studies, most of which only talked about news and mobile phones in general, about the use of smartphones by INOs and journalists in LMICs without featuring chat apps, or about the use of chat apps in other academic disciplines (most notably in medicine, nursing, and education) but not in journalism or for the purpose of accessing and sharing news, only one study was found in the second search iteration to be eligible for inclusion in the purpose of this study (i.e., it matched the inclusion criteria of *chat app* and *news* in the broadest sense). The included full text, which matched the search criteria only peripherally, as it did not talk about the use of chat apps by news organizations, was critically appraised for its methodological quality. Despite this relative dearth of academic studies in the field, I discovered a number of reports, magazine and newspaper articles, and blog posts by INOs that examined the use of chat apps more generally. However, as a clear limitation of this study, the systematic search did not include languages other than English (particularly Mandarin, Cantonese, or Hindi, which would have allowed a search for studies on the use of mobile instant messaging apps such as WeChat in China, for example).

The included study, written by Malka, Ariel, and Avidar (2015), talked about the role of WhatsApp among Israeli citizens to receive and share information, news, and updates during war menaces in July 2014, finding, among other points, that WhatsApp played an important multifunctional role as a mass and interpersonal communication channel during this time.

However, aside from this study, the vast majority of the literature identified for the purpose of this article were media industry reports, case studies by INOs or other stakeholders, and news items. For example, O'Donovan (2014) analyzes the potential for news media organizations to scale up chat apps to reach new audiences, and Barot and Oren (2015) interview industry representatives and analyze the current status quo of the use of chat apps by news organizations. But what becomes perhaps most apparent through this systematic approach is that the increasing popularity of chat apps among INOs, as echoed widely in the gray literature, seems not to have found its way into academia yet. Indeed, a systematic review of academic literature suggests that a substantial gap exists in news media and journalism studies.

In addition to a lack of evidence of the potential feasibility of chat apps' long-term use at scale, a number of additional challenges can be identified with regard to the strategic long-term use of chat apps by INOs. The expert interviews suggest that these main challenges presently faced by INOs wanting to roll out and scale up their chat app pilots are: (a) The apps are not built to be pushed out to thousands of people at the same time because at the moment, users need to be added manually, and (b) although WhatsApp recently became available on Internet browsers, some chat apps are still only handset based, which makes the maintaining and creation of the user base highly labor intensive. As one of the experts explained:

If we were to launch a global English news account on WhatsApp, we would probably get hundreds of thousands of subscribe requests; there's no way we could manage that level of requests because it just becomes unscalable in terms of all the broadcast lists we'd need to do, and every time we get a subscribe request, we have manually add that number onto the handset one by one and then move it to a broadcast list individually

one by one. So it's very labor intensive and so it's not something we can scale up for that level. So that's why we've been very cautious about it. (Expert interview conducted in 2015)

Moreover, from the viewpoint of the INOs, stakes are high to get it right the first time—once the news has been pushed out, it cannot be retracted or edited. Additionally, INOs have to comply with chat app company policies, which can be ethically problematic and compromising, for example, when governments make censorship demands.

Given these identified challenges and the simultaneous potential of chat apps, is the question of how international media players can leverage these mobile instant messaging apps to reach new audiences perhaps ill posed? To break out of what seems to be a perpetual pilot phase, should we rather reframe the initial question and instead ask, with Price, Haas, and Margolis (2008), "What is there about the organization, management structure and geopolitical context of each entity that leads to one pattern of technological adjustment or another?" (p. 152)

#### **Weighing Potential and Evidence: A Call for Future Research**

On balance, it can be argued that whereas there seems to be a real interest and demand for INOs to include chat apps as part of their distributive systems to relate to younger and new audiences particularly in LMICs and that global message volume statistics of some chat apps appear to confirm this approach, the field seems too young for there to be an established evidence base. Most projects of international news organizations seem not to have grown beyond the pilot stage yet.

Although findings of this study seem to suggest that mobile-first strategies, particularly the use of chat apps, could be a way forward for INOs in population-rich LMICs to reach new audiences and engage with a younger generation, most of the evidence of this potential is only anecdotal so far. This article highlights the potential of chat apps to reach underserved and hard-to-reach audiences, but through a systematic approach also identifies a substantial gap in research and evidence regarding the use of chat apps by INOs. As Goggin, Martin, and Dwyer (2015) pointedly observed in their work on locative news and mobile media that,

There is little research on the spaces and places of mobile news use is nothing surprising given the state of news media economics, but considering the financial, industrial, and cultural investments now being poured into mobile news, it is research that is badly needed—not least if we take seriously the now-fashionable proposition that digital media is nothing if not co-constructed with its audiences. (p. 42)

The same could indeed be said for the investment of INOs in chat apps to reach new, young audiences in LMICs. In addition, more reflective analysis is needed of the changing understanding of news in the context of highly personalized locative news consumption and production through smartphones on the one hand and the universalizing implications of global news on the other. Although mobile instant-messaging applications may have the potential to transform the news industry, what seems to be needed

most at this stage is more transparency, research, and evaluation of the outcome of completed pilot projects—to learn what works and what doesn't to weigh the feasibility and costs of chat app projects to scale.

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