

## Understanding Consumer Perspectives On Encryption

### Introduction

Instant messaging services have become a popular means of communication in India. One of the unique features of instant messaging service is that it ensures privacy and anonymity, which enables security in communication. This privacy and security over instant messaging services are made possible through end to end encryption (E2E) technology. In 2018, over 72 percent of all daily network traffic was encrypted and more than 1.5 billion people used E2E encrypted messaging services.<sup>1</sup> In July 2019, it was reported that around 400 million consumers used WhatsApp, a popular encrypted communication service, in India alone.<sup>2</sup>

### Problematicue

Despite the increasing use of encryption in communication services, it is not clear if consumers are aware of the role of encryption in securing communication, enhancing privacy and ensuring free speech. There is limited literature on consumers' perspectives on encryption (awareness, perceptions, purposes, experiences, the utility they derive, and expectations) of secured communication services, particularly in developing countries like India.

Furthermore, increasingly secured communication services are being misused by malicious actors for illegal purposes including the circulation of inflammatory and problematic content. To address this, law enforcement agencies around the world are seeking support from service providers in identifying originators of these messages. Similar regulatory frameworks are also being developed in India for making instant messaging service providers more accountable.<sup>3</sup> But the role of consumers in dealing with problematic content has largely been ignored.

### CUTS Study

In order to address these gaps, a study based on interaction with consumers to assess their perspective on secured communication services needs to be conducted. Being a consumer-centric

organisation, CUTS is undertaking this study with the objectives mentioned below.

### Proposed Objective

The primary objective of the study is to bring forth a consumer perspective on secured communication services and encryption. This would be done on the following indicative parameters:

- Awareness, perception, experience, utility derived, and expectation from secured communication services;
- Consumer's reaction and behaviour towards unsecured communication services, and towards problematic content on secured communication services.

### Approach and Methodology

The Study will encompass desk research and consumer interactions through appropriate consumer interaction tools, in order to gauge and understand consumer perspectives.

- **Desk Research:** This will involve extensive review of relevant literature, reports, papers and articles available in public domain on the relevance of secured communication services for consumers and the role of encryption in enhancing privacy and anonymity in communications. In this regard, the relevant

literature on utility derived by consumers from secured communication services (and a difference in utility levels from unsecured communication services), studies conducted across jurisdictions on consumer perspectives towards secured communication services in general, and privacy and encryption in particular, if available, will be reviewed. Initiatives involving consumers to prevent misuse of encrypted technologies will also be reviewed.

- **Gap Assessment and Consumer Interaction Strategy:** Based on secondary research, information gaps to be plugged through an in-person consumer interaction will be identified. In this regard, the relevant hypothesis will be designed and tested, pertaining to the parameters mentioned in the objective.
- **Primary Research:** Appropriate consumer interaction tools (such as structured and semi-structured questionnaires having multiple-choice and open-ended questions to obtain quantitative and qualitative responses) would

be designed to facilitate on-ground interaction with consumers from different demographic profiles and geographic settings.

## Expected Outcome

Better understanding among relevant stakeholders (industry, policy influencers, etc.) on consumers' perspectives on secured communication services and encryption.

## Envisaged Outputs

- The findings of the study would be captured in the form of a project report/presentation or any other appropriate format.
- Select consumer interactions that would be captured in an audio/visual format.

## Project Duration

The total estimated time frame for the project is five months.

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## Endnotes

- 1 Joint Call to World Leaders for a Secure and Trusted Digital Economy, [https://www.g7openletter.org/#\\_ftn3](https://www.g7openletter.org/#_ftn3)
- 2 Singh, Manish. WhatsApp reaches 400 million users in India, its biggest market, Tech Crunch, July 26, 2019, at <https://techcrunch.com/2019/07/26/whatsapp-india-users-400-million/>. Also, during the 24 hours leading up to midnight on New Years Eve, over 20 billion messages were sent via the private messaging app in India alone. See, WhatsApp users in India sent 20 billion messages on New Year's Eve, <https://www.freepressjournal.in/technology/whatsapp-users-in-india-sent-20bn-messages-on-new-years-eve>
- 3 For instance, the Personal Data Protection Bill 2019 and Draft Intermediary Guidelines Rules, 2018. It has also been reported that a Parliamentary Panel has suggested that law enforcement agencies should be able to break encryption to prevent child pornography. See, <https://timesofindia.indiatimes.com/india/agencies-should-be-able-to-break-online-encryption-panel/articleshow/73681748.cms>

