# COMMUNICATION DYNAMICS THROUGH INSTANT MESSAGING APPLICATIONS: A LITERATURE ANALYSIS OF THE TELEGRAM AND WHATSAPP PLATFORMS

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#### **Abstract**

This research analyses the dynamics of communication through instant messaging applications, with a particular focus on two popular platforms, Telegram and WhatsApp. Through a comprehensive literature review, it is found that Telegram and WhatsApp have unique characteristics that influence users' communication patterns. Telegram is known for its flexibility in managing large groups and advanced feature integration, while WhatsApp is recognised for its strong end-to-end encryption and user-friendly interface. These differences make the choice between the two platforms dependent on specific usage needs-Telegram is more suitable for complex group communications, while WhatsApp is ideal for personalised interactions with a high priority on privacy. The conclusions of this study help in understanding the advantages and disadvantages of each app and provide guidance in choosing the right communication platform according to user needs.

**Keywords:** Dynamics, Communication, Instant Messaging Application, Telegram Platform, WhatsApp.

## Introduction

The digital age has brought radical changes in the way we communicate. Communication is the process of exchanging information, ideas, thoughts, and feelings between individuals or groups through the use of symbols that can be understood together, be it in oral, written, visual, or non-verbal form. The purpose of communication is to achieve mutual understanding, expand knowledge, influence behaviour, and build social relationships (Bahri et al., 2020). In this process, there is a message sender who encodes information into a form that can be conveyed, as well as a message receiver who decodes it to understand the intended meaning. The effectiveness of communication depends on various factors, including the clarity of the message, the medium used, and the situational context (Urakami & Lim, 2021).

One of the significant developments in communication technology is the emergence of instant messaging apps that enable fast, cheap, and efficient communication. The two most prominent and popular instant messaging apps today are Telegram and WhatsApp (Xu, 2022).

Telegram and WhatsApp are two popular instant messaging applications used to communicate in real-time over the internet. Telegram is known for its strong security features and flexibility, including optional end-to-end encryption, secret chats, and the ability to send large files and support groups of up to thousands of members (Ong & Rahman, 2020). WhatsApp, owned by Facebook (now Meta), also offers end-to-end encryption by default, and is known for its simple interface and deep integration with users' phone contacts, enabling text messaging, voice and video calls, and easy sharing of photos, videos and documents. Both platforms have become essential communication tools in different parts of the world, enabling fast and efficient communication among their users (Sahafizadeh & Ladani, 2020).

The use of instant messaging apps has seen a significant increase in the past decade. Data shows that WhatsApp, which launched in 2009, now has more than 2 billion monthly active users worldwide. Telegram, which started its operations in 2013, has also reached more than 500 million monthly active users. Both platforms are not only used for personal communication but also for business, education, and community purposes, making them highly versatile communication tools (Silva et al., 2023).

Digital communication through instant messaging apps offers various benefits, such as instant messaging, the ability to easily share files, images and videos, and integration with various additional services and features. However, new challenges related to privacy, security and communication ethics have also emerged. Although many instant messaging applications offer end-to-end encryption to protect message content, users are often still vulnerable to security risks such as hacking, phishing, and eavesdropping (Parrilli & Hernández-Ramírez, 2023) . In addition, instant messaging service providers may have to cooperate with governments or authorities, which may result in potential privacy violations. This excess access by third parties can undermine users' trust in the platform (Blumell & Mulupi ., 2024)

Another significant challenge is information management and communication overload. With the ease and speed of communicating through instant messaging applications, users are often faced with a large number of unorganised messages in group or individual conversations. This can cause confusion, reduce productivity, and increase stress (Hidalgo et al., 2024). In addition, the tone and context in text messages are easily misinterpreted, which can lead to misunderstandings and potential conflicts. Ultimately, the success of digital communication through instant messaging depends on users' proficiency in managing and filtering information, as well as their ability to understand and respond to messages appropriately and politely (Chan & Tsai, 2023).

With the widespread use of instant messaging apps, there has been a significant change in human communication patterns. Traditional communication patterns are being replaced with text messages that are faster, but often lack depth. Digital communication can also affect social and cultural relationships in society, such as changes in the way we communicate with friends, family, and in the work environment.

With this background, the research "Communication Dynamics Through Instant Messaging Applications: A Literature Analysis of the Telegram and WhatsApp Platforms" is expected to make a valuable contribution to our understanding of the changing patterns of communication in the digital era.

#### **Research Methods**

The study in this research uses the literature method. The literature research method, or literature review, is an approach to data collection and analysis that focuses on the detailed study and evaluation of existing sources related to a specific research topic. In this method, researchers identify, access, and review various forms of literature such as books, journal articles, research reports, theses, and other digital sources to summarise existing knowledge, identify research gaps, and find common patterns or trends in the subject under study (Hidayat, 2009); (Afiyanti, 2008). Literature research also allows researchers to form a strong theoretical base, develop hypotheses, and gain inspiration for new methods or perspectives in follow-up studies. The process involves several critical steps, including a comprehensive literature search, critical evaluation of relevant sources, synthesis of findings, and preparation of a report that organises the information in a systematic and analytical way (Syahran ., 2020)

#### **Results and Research**

# **Communication Dynamics on Telegram and Whatsapp**

Communication through apps such as Telegram and WhatsApp has a unique dynamic, which is influenced by the special features offered by each platform. Telegram, for example, is known for its ability to manage large groups and offers a variety of bots and channels that can assist in the distribution of news or information on a wide scale (Prinkal, 2020). Groups on Telegram can have up to 200,000 members, which gives it a huge amount of flexibility and communication capacity. In addition, Telegram also allows users to create secret chats with end-to-end encryption and advanced self-destructing messages, which adds an extra layer of security to private communications (Silva et al., 2023).

Meanwhile, WhatsApp is more focussed on personalised communication and small to medium-sized groups. Groups on WhatsApp have a smaller member limit of around 256 people, which encourages more intimate and personalised communication. WhatsApp is also known for being easy to use and a very popular instant messaging app in many countries. The end-to-end encryption feature applied by default to all messages, video and voice calls offers reliable security, fostering a sense of security among its users. WhatsApp also supports high-quality voice and video calls, which makes it ideal for real-time personal and professional communication (Salamh et al., 2020).

However, there are some dynamics that affect the way users interact on both platforms. On Telegram, the large nature of groups and channels can cause information

to overwhelm users, requiring them to actively manage notifications and filter relevant information. In addition, because Telegram allows users to easily search for and join specific groups and channels, there is a risk of exposure to information that may not be verified or the spread of hoaxes (Gwiazdowska, 2024). Therefore, verification of information sources is important in maintaining the quality of communication and content received.

WhatsApp, on the other hand, is mostly used for personal and professional conversations on a smaller scale. Challenges that often arise include message overload in small, highly active groups, which can interfere with user convenience and productivity. In addition, since WhatsApp uses phone numbers to add contacts, there is a higher retention rate and users tend to communicate with those they already know, unlike Telegram which allows anonymous usernames. This provides a more personalised field of communication, but can also create a tendency for exclusivity in more closed social networks (Apte & Upadhyay, 2023).

Overall, Telegram and WhatsApp each have strengths and weaknesses that affect their users' communication dynamics. The choice between these two platforms is often determined by the specific needs of the user, whether for large group communication and mass information distribution or for more personalised and private interactions. Understanding the features and capabilities of each of these apps can help users to more effectively choose a platform that suits their communication needs.

# Strengths and weaknesses of Telegram and Whatsapp communication

Comparing the strengths and weaknesses of communication via Telegram and WhatsApp, each platform has its own advantages and challenges. Telegram is known for its capacity to handle large groups and channels, which allows the distribution of information to a wide audience. This is especially beneficial for organisations or communities that want to achieve a wide reach. Features such as automated bots and public channels are also strengths of Telegram that make it easy to disseminate information and automate simple tasks (Gill & Rojas, 2021).

On the security side, Telegram offers advanced features such as secret chats with end-to-end encryption and auto-deleting messages. This gives users additional control over the privacy and security of their personal data. However, one of the downsides of Telegram is that regular (non-confidential) chats are not end-to-end encrypted by default, meaning these conversations do not get the highest layer of security often associated with state-of-the-art encryption (Riadi et al., 2020).

WhatsApp on the other hand has its main strength in its simplicity and wide popularity, making it a commonly used messaging app across a wide range of ages and backgrounds. The end-to-end encryption applied by default to all types of communication helps prevent unauthorised access and increases the sense of security in everyday use. WhatsApp also offers support for high-quality voice and video calls,

making it highly versatile for both personal and business communication (Dhir et al., 2020).

However, one of the downsides of WhatsApp is the limited group size that can only accommodate a maximum of 256 members. This makes it less ideal for larger communities or organisations that require communication and collaboration on a wider scale. In addition, WhatsApp's reliance on phone numbers to add contacts can limit anonymity and accessibility for users who prefer not to share their personal information (Chakraborty, 2025).

Overall, the choice between Telegram and WhatsApp should be based on the user's specific needs. Telegram should be used when large communication capacity and wide distribution of information is required, while WhatsApp is best suited for more secure and interactive private communication on a smaller scale. Understanding the strengths and weaknesses of each of these apps will help users choose the platform that best suits their diverse communication requirements.

## Conclusion

The dynamics of communication through the instant messaging apps Telegram and WhatsApp show that these two platforms have different strengths and weaknesses, which affect the way users communicate. Telegram excels in flexibility and the ability to manage large communities, thanks to features such as large group member capacity, channels for disseminating information, and the ability to integrate bots. This makes Telegram suitable for organisations or groups that need a more complex and structured communication solution.

On the other hand, WhatsApp offers end-to-end encryption by default on all types of communication, giving high priority to user privacy. The simple interface and ease of adding contacts via phone numbers make it a very user-friendly option. WhatsApp is more suitable for personal or small group communication where message security is a major concern.

In general, the choice between Telegram and WhatsApp depends on the specific needs of the user or organisation. Telegram provides more flexibility and scale, while WhatsApp offers high security and ease of use. Therefore, a thorough understanding of the features and capabilities of each app can help users choose the platform that best suits their communication needs.

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