

COMPARATIVE ANALYSIS OF THE USE OF ZOOM AND GOOGLE MEET APPLICATIONS IN SUPPORTING ONLINE COMMUNICATION IN THE DIGITAL AGE

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ABSTRAK-Perkembangan teknologi informasi dan komunikasi telah mendorong penggunaan media komunikasi daring sebagai alat utama untuk mendukung kegiatan pendidikan dan organisasi. Salah satu bentuk komunikasi daring yang paling banyak digunakan adalah aplikasi konferensi video. Zoom dan Google Meet merupakan dua aplikasi konferensi video yang populer di masyarakat. Penelitian ini bertujuan untuk menjelaskan konsep Zoom dan Google Meet serta membandingkan penggunaan kedua aplikasi tersebut dalam mendukung komunikasi daring berdasarkan fitur aplikasi dan perspektif pengguna. Metode penelitian yang digunakan adalah deskriptif komparatif dengan pendekatan studi pustaka. Hasil penelitian menunjukkan bahwa Zoom unggul dalam kelengkapan fitur dan stabilitas komunikasi, terutama untuk rapat dengan jumlah peserta yang besar. Sementara itu, Google Meet lebih unggul dalam kemudahan akses dan integrasi dengan layanan Google. Perbedaan ini memengaruhi preferensi pengguna dan tingkat penggunaan aplikasi sesuai dengan kebutuhan komunikasi daring. Data penelitian diperoleh dari jurnal ilmiah nasional dan internasional yang diterbitkan dalam kurun waktu sepuluh tahun terakhir (2015–2025). Sumber data dikumpulkan melalui basis data akademik dan platform jurnal akses terbuka. Kriteria pemilihan literatur meliputi artikel yang membahas Zoom atau Google Meet, penelitian yang berkaitan dengan komunikasi daring, pembelajaran daring, atau konferensi video, dan publikasi yang berasal dari jurnal bereputasi.

Kata Kunci: Zoom, Google Meet, Komunikasi Daring

ABSTRACT - *The development of information and communication technology has encouraged the use of online communication media as the main tool to support educational and organizational activities. One of the most widely used forms of online communication is video conferencing applications. Zoom and Google Meet are two popular video conferencing applications. This study aims to explain the concepts of Zoom and Google Meet and compare the use of these two applications in supporting online communication based on application features and user perspectives. The research method used is descriptive comparative with a literature study approach. The results show that Zoom excels in feature completeness and communication stability, especially for meetings with a large number of participants. Meanwhile, Google Meet excels in ease of access and integration with Google services. These differences affect user preferences and the level of application usage according to online communication needs. The research data was obtained from national and international scientific journals published in the last ten years (2015–2025). The data sources were collected*

through academic databases and open access journal platforms. The criteria for selecting literature included articles discussing Zoom or Google Meet, research related to online communication, online learning, or video conferencing, and publications from reputable journals.

Keywords: Zoom, Google Meet, Online Communication

INTRODUCTION

The development of information and communication technology (ICT) over the past two decades has significantly changed the way humans interact, collaborate, and share information. Advances in digital infrastructure and high-speed internet access have expanded human communication from the physical environment to the virtual realm, which is not limited by time and distance (Cangara, 2016). This transformation has given rise to a new form of communication called online communication, in which messages are sent and received via internet-based media, either synchronously or asynchronously. (Nasrullah, 2017).

As global connectivity increases, the use of online communication technology has become an important part of education, business, and government activities. In the context of educational organizations and institutions, this technology plays a role in facilitating collaboration, coordination, and the implementation of remote academic activities (Nugroho & Ramadhani, 2020). Digital communication models enable efficient information delivery, reduce geographical barriers, and increase the effectiveness of interactions between individuals and groups (Wiryany, dkk. 2024).

The COVID-19 pandemic in 2020 became an important momentum that accelerated the adoption of online communication around the world. Social distancing policies forced various institutions to switch to technology-based remote working and learning systems. In this situation, video conferencing applications became the main means of communication, enabling real-time interaction between users in different locations (Dhawan, 2020; Dewi, 2020). This phenomenon marks a paradigm shift in communication from conventional face-to-face interaction to a more flexible and adaptive digital communication model.

The two most prominent video conferencing applications used during the pandemic to date are Zoom and Google Meet. These two platforms have become the top choice among educators, students, and professionals due to their ability to facilitate online meetings with high stability and a wide range of features. Zoom is known for its comprehensive features, such as breakout rooms, meeting recording, and large participant capacity, which support large-scale

academic and professional activities (Hudaya & Nurmianti, 2024; Martyani & Yamalia, 2023). Meanwhile, Google Meet offers advantages in terms of ease of access, system integration with Google Workspace services (such as Google Calendar and Google Classroom), and a simpler interface for new users. (Noviandani 2023)

Previous studies have shown that the choice of video conferencing platform is influenced not only by technical features, but also by user experience and specific communication needs. Factors such as internet connection stability, ease of navigation, collaboration efficiency, and data security are important indicators that determine user satisfaction and preferences (Widiyanto, 2022). Therefore, understanding the comparison between Zoom and Google Meet is not limited to evaluating features, but also how these two applications are able to meet user expectations and needs in various online communication contexts.

In the context of the ever-evolving digital age, choosing the right communication media is a strategic element in supporting the effectiveness of virtual learning and collaboration (Utami Seminar.A, 2022) A comparative study of Zoom and Google Meet is relevant to assess the extent to which both applications can meet the demands of modern communication that emphasizes accessibility, efficiency, and user convenience. Therefore, this study aims to analyze and compare the use of Zoom and Google Meet in supporting online communication, both in terms of features and user perspectives, so as to provide a more comprehensive understanding of the effectiveness of these two platforms in the context of today's digital communication.

LITERATURE REVIEW

1. Online Communication in the Digital Age

Online communication is a form of communication that utilizes the internet network as the primary medium for conveying messages. According to Nasrullah (2017), Online communication enables synchronous (real-time) and asynchronous interactions without the limitations of space and time. Advances in digital technology have made online communication an important part of various sectors, particularly education, organizations, and the world of work.

The COVID-19 pandemic has accelerated the transformation of online communication into a primary necessity. Distance learning and online work systems have driven the use of video conferencing platforms as an effective means of interactive communication (Dhawan, 2020; Dewi, 2020). In this context, video conferencing applications serve not only as

communication tools, but also as media for collaboration and coordination.

2. Video Conferencing Applications as a Communication Medium

A video conferencing application is a digital platform that enables live audio-visual communication between two or more parties. According to Nugroho dan Ramadhani (2020), Video conferencing applications support communication processes that resemble face-to-face interactions, thereby improving the effectiveness of message delivery in learning and organizations.

Zoom and Google Meet are two of the most widely used video conferencing applications due to their ability to provide real-time communication, collaborative features, and relatively easy access. Several studies show that the effectiveness of video conferencing applications is influenced by technical factors (features, network stability) and non-technical factors (user experience and ease of access), (Putra & Widjianto, 2022).

3. Zoom: Definition, Functions, and Uses

Zoom is a cloud-based video conferencing application developed to support real-time remote communication via audio and video. Zoom is widely used in online learning activities, organizational meetings, seminars, and international conferences due to its large participant capacity and comprehensive supporting features (Hudaya & Nurmiati, 2024).

Zoom has several key functions that support digital communication, including:

a) Online Face-to-Face Communication Tool

Zoom functions as a communication medium that allows users to meet face-to-face virtually through video and audio, so that communication remains interactive even when conducted remotely.

b) Online Learning Medium

In the field of education, Zoom functions as a platform for online teaching and learning processes, such as lectures, online classes, seminars, and training. Lecturers and teachers can deliver material directly to students.

c) Meeting and Coordination Tool

Zoom is used for work meetings, team discussions, and organizational coordination without the need for physical meetings. This makes the work process more efficient and flexible.

d) Presentation Tool

Zoom functions as a tool for delivering presentations with a screen sharing feature, allowing participants to view materials such as PowerPoint slides, documents, or videos directly.

Uses of Zoom

Zoom has various practical uses in everyday life, including:

a). Supporting Distance Learning

Zoom is very useful in online learning because it provides features such as video conferencing, chat, screen sharing, and meeting recording, which help the learning process to continue effectively.

b). Facilitating Work Communication

In the world of work, Zoom is useful for online meetings, job interviews, and project discussions, saving time and travel costs.

c). Webinar and Online Seminar Tool

Zoom is often used for webinars, workshops, and online seminars with a large number of participants, as it can accommodate many users in one meeting.

d). Activity Documentation

Zoom has a recording feature that is useful for recording meetings, so that they can be used as documentation or evaluation material in the future.

e). Improving Efficiency and Flexibility

With Zoom, users can communicate from anywhere and at any time, as long as they are connected to the internet. This increases flexibility and efficiency in various activities.

4. Google Meet: Definition, Functions, and Uses

Google Meet is a video conferencing application developed by Google and integrated with Google Workspace services. Google Meet is designed to provide easy access for users through a web browser without the need to install additional applications, making it more practical and efficient (Noviandani et al., 2023).

Google Meet Functions

Google Meet has several key functions that support digital communication, including:

a). Online Face-to-Face Communication Medium

Google Meet serves as a virtual communication tool that allows users to interact directly through video and audio, ensuring effective communication even when conducted remotely.

b). Online Learning Medium

In the field of education, Google Meet serves as a platform for online teaching and learning activities, such as lectures, online classes, academic guidance, and group discussions.

c). Meeting and Coordination Tool

Google Meet is used as a medium for work meetings, team coordination, and organizational meetings, both on a small and large scale.

d). Presentation and Collaboration Medium

Google Meet functions as a means of presenting material with a screen sharing feature that is integrated with other Google services such as Google Slides, Google Docs, and Google Drive.

Uses of Google Meet

Google Meet has various uses in everyday life, including:

a). Supporting Academic Activities

Google Meet is very useful in distance learning, as it supports direct interaction between teachers and students and facilitates the delivery of material online.

b). Facilitating Work and Business Activities

In the workplace, Google Meet is used for online meetings, job interviews, and project discussions, thereby increasing time efficiency and reducing operational costs.

c). A Tool for Webinars and Online Discussions

Google Meet can be used for webinars, online seminars, and public discussions, especially when integrated with Google accounts and calendars.

d). Supporting Documentation and Archiving

Google Meet provides a meeting recording feature that is stored directly in Google Drive, making it easy to store and manage activity archives.

e). Improving Communication Efficiency

Google Meet allows users to communicate from various locations without geographical restrictions, as long as they are connected to the internet, thereby increasing flexibility and productivity.

Comparison of Zoom and Google Meet Features

In terms of features, Zoom is known to be more comprehensive than Google Meet. Features such as breakout rooms, virtual backgrounds, polls, screen sharing, and gallery view provide a more interactive and collaborative communication experience (Hudaya & Nurniati, 2024). Therefore, Zoom is often chosen for large-scale activities that require intensive interaction.

In contrast, Google Meet stands out for its simplicity and system efficiency. Although the features offered are relatively more limited, Google Meet excels in ease of use and data efficiency. The automatic compression system allows Google Meet to remain stable on limited internet networks (Qolbi et al., 2022).

User Preferences for Zoom and Google Meet

Previous studies show that user preferences for Zoom and Google Meet are influenced by communication needs and usage context. Zoom tends to be chosen by users who need comprehensive features and high communication quality, while Google Meet is preferred by users who prioritize ease of access and system integration. (Putra et al., 2021; Rahayu et al., 2022).

. Thus, both applications play complementary roles in supporting online communication. Zoom and Google Meet cannot be considered superior in absolute terms, but rather effective according to the needs and circumstances of their use.

RESEARCH METHOD

This study uses a comparative descriptive research method with a literature review approach. This method was chosen because the study aims to describe and compare the use of two video conferencing applications, namely Zoom and Google Meet, in supporting online communication.

The research data was obtained from national and international scientific journals published

in the last ten years (2015–2025). Data sources were collected through academic databases and open access journal platforms. Literature selection criteria

Data analysis was conducted using qualitative content analysis techniques, namely by identifying, classifying, and comparing the main aspects. The results of the analysis were then interpreted to draw conclusions about the advantages and disadvantages of each application in supporting online communication.

THEORETICAL STUDY

Online communication is the process of conveying messages through internet-based media without direct face-to-face interaction. According to Cangara (2016), Communication is the process of conveying messages from the communicator to the audience through certain media with the aim of achieving a common understanding. In the digital context, online communication enables synchronous and asynchronous interaction (Nasrullah, 2017).

Zoom is a cloud-based video conferencing application that allows users to communicate via audio and video in real time. Zoom provides various supporting features, such as screen sharing, breakout rooms, meeting recording, and flexible participant management. These features make Zoom widely used in online learning activities and professional meetings (Hudaya & Nurmiati, 2024; Martyani & Yamalia, 2023).

Google Meet is a video conferencing application developed by Google and integrated with Google Workspace services. Google Meet can be accessed directly through a web browser without the need to install additional applications, making it more practical and easier to use for online meetings. (Noviandani et al., 2023; Qolbi et al., 2022).

RESULTS AND DISCUSSION

The results of the literature review show that advances in communication technology have brought about major changes in the way humans interact and communicate. The emergence of various video conferencing applications is clear evidence of the digital transformation that has facilitated communication across space and time. Of the various platforms available, Zoom and Google Meet are the two most widely used applications in various online activities, whether in the education sector, organizations, or the world of work. Both serve to facilitate direct two-way communication through audio and video, although they differ in terms of features, network stability, and user experience. (Dhawan, 2020; Dewi, 2020).

1. Comparison of Features and Functionality

In general, Zoom is known to be superior because it has more complete and flexible features to support interactive communication. Facilities such as breakout rooms, virtual backgrounds, polls, and screen sharing enable more dynamic interactions between participants and speakers (Hudaya & Nurmiati, 2024). One of the most frequently used features is breakout rooms, which allow users to divide discussion groups into several smaller rooms. This feature is very useful in online learning activities and meetings with a large number of participants. Its large participant capacity and ability to record meetings make Zoom very effective for academic activities such as public lectures, seminars, and international conferences. (Martyani & Yamalia, 2023).

Meanwhile, Google Meet has advantages in terms of ease of access and integration with other systems. Unlike Zoom, which requires the installation of an application, Google Meet can be used directly through a web browser, making it more practical for new users. In addition, integration with Google Workspace services such as Gmail, Google Calendar, and Google Drive makes it easier for users to schedule meetings, send invitations, and share documents quickly (Noviandani et al., 2023; Qolbi et al., 2022). This convenience makes Google Meet an ideal choice for users in the education and office sectors who are already familiar with Google's digital ecosystem.

2. Communication Quality and Network Stability

In terms of connection stability and communication quality, several studies show that Zoom performs better, especially when used on a strong internet network. The image and sound quality produced tends to be clearer because Zoom uses an efficient data compression system, even though it requires greater bandwidth (Muran et al., 2021). However, Zoom's main weakness is its dependence on internet speed. Users with slow networks often experience problems such as lag or interrupted sound (Hudaya & Nurmiati, 2024).

In contrast, Google Meet is considered more data-efficient. This application uses an automatic compression system that intelligently adjusts video quality to the user's network speed. Thus, Google Meet can function more stably even under limited network conditions or when using devices with low specifications (Qolbi et al., 2022). Therefore, in terms of network efficiency, Google Meet is more flexible and user-friendly in various technical conditions.

3. User Experience

In terms of user experience, Zoom is considered superior in creating an active and collaborative communication atmosphere. Features such as gallery view, chat box, reaction emojis, and screen sharing allow users to interact directly with speakers and other participants (Putra et al., 2021). With these various features, Zoom is able to provide a communication experience that is closer to face-to-face interaction, so many educational institutions and companies choose it for training activities and formal meetings. Meanwhile, Google Meet excels in terms of simplicity and ease of use. Its minimalist interface design makes it easy to operate even for new users who are unfamiliar with technology (Noviandani et al., 2023). Based on research, many users choose Google Meet because of its quick access and easy navigation, especially for short meetings such as internal coordination or small group discussions. Direct integration with Google accounts is also a plus, as users do not need to register or install additional applications to join meetings.

4. Data Security and Privacy Aspects.

Both Zoom and Google Meet have made significant improvements in terms of data security and user privacy. After receiving criticism at the beginning of the pandemic, Zoom updated its system by adding a waiting room feature, user authentication, and password protection (password meeting) to prevent unauthorized access. Meanwhile, Google Meet implements a Gmail-based security system equipped with two-factor authentication and end-to-end encryption that is automatically activated during each meeting session (Hudaya & Nurmiati, 2024). Based on research findings, Google Meet tends to be more trusted in terms of security because its infrastructure is managed directly by Google, which has global security standards.

5. Effectiveness in Education and Organizations

In the context of education, both applications play an important role in supporting the continuity of teaching and learning activities during the COVID-19 pandemic. Zoom is more commonly used at the university level because it can accommodate a larger number of participants and has comprehensive collaborative learning features (Dhawan, 2020; Dewi, 2020). Meanwhile, Google Meet is more widely used in elementary and secondary schools because it is easier to access, does not require additional installation, and can be run on devices with low specifications (Qolbi et al., 2022).

Beyond education, both applications are also effective in the workplace and organizations. Zoom is widely used for training activities, seminars, and professional meetings that require intensive communication, while Google Meet is generally used for routine meetings, short meetings, or team coordination (Hidayat & Pratama, 2022). This shows that both platforms are able to adapt to their respective needs and contexts.

6. Comparative Analysis of SPECIFIC

Based on the analysis results, it can be concluded that Zoom is superior in terms of feature completeness, communication stability, and user interactivity. Meanwhile, Google Meet stands out in terms of ease of access, system integration, and data usage efficiency. The choice of application should be tailored to the needs and context of the communication activity. Zoom is recommended for large-scale activities that require intensive interaction and comprehensive feature support, while Google Meet is more suitable for routine communication that requires quick and practical access. Both applications have proven to play an equally important role in supporting digital communication transformation in the post-pandemic era, while also enhancing flexibility and effectiveness in work and online learning (Martyani & Yamalia, 2023; Putra et al., 2021).

Tabel 1. Comparison of Zoom and Google Meet app usage

NO	Platform	Advantages	Shortcomings
1.	Zoom	<ul style="list-style-type: none">a) Video and audio quality is relatively stable even with many participantsb) Has complete features such as breakout rooms, virtual backgrounds, and automatic recordingc) Suitable for webinars and large-scale meetingsd) Supports various interaction methods (chat, raise hand, polling)	<ul style="list-style-type: none">a) The free version is limited to 40 minutes for group meetingsb) Requires installation of the application for maximum usec) Data consumption is relatively higher compared to Google Meet

2.	Google meet	<ul style="list-style-type: none">a) Directly integrated with Google Workspace (Gmail, Google Calendar, Google Drive)b) Accessible directly through a browser without installationc) Simple and easy-to-use interfaced) More data efficient and lightweight	<ul style="list-style-type: none">a) Limited advanced features compared to Zoomb) No breakout rooms in the free version (depending on Google Workspace policy)c) Not optimal for very large webinars
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CONCLUSION

Based on the results of the literature review that has been conducted, it can be understood that both Zoom and Google Meet have important contributions in supporting online communication in this interconnected digital age. These two applications serve as the main tools in supporting educational, business, and organizational activities that require direct interaction even when conducted remotely. However, both have different strengths and limitations in terms of features, connection stability, user experience, and system efficiency.

Zoom stands out in terms of feature completeness and communication quality stability. Features such as breakout rooms, screen sharing, polling, and virtual backgrounds make Zoom more interactive and flexible in accommodating large-scale learning activities and professional meetings. Another advantage lies in its relatively high audio and video stability, although this application requires greater internet network capacity than Google Meet.

On the other hand, Google Meet has its own appeal in terms of ease of use, system integration, and data efficiency. Direct access via a browser without the need for additional installation makes this application more practical and easy to operate for various types of users. Strong integration with Google Workspace services such as Gmail, Google Calendar, and Google Drive also increases productivity because all meeting activities and documents are synchronized in one system. These advantages make Google Meet more suitable for routine

meetings, coordination activities, and distance learning with less complex technical requirements.

From a user experience perspective, Zoom excels at creating an interactive and participatory communication environment, while Google Meet excels in interface simplicity and ease of navigation. Both platforms have also strengthened data security through encryption and two-factor authentication systems. However, Google Meet is generally more trusted for privacy protection as it operates within Google's global security infrastructure.

Overall, the choice of video conferencing application needs to be tailored to the context of use and user needs. Zoom is recommended for academic or professional activities that require comprehensive features and high interaction, while Google Meet is more suitable for short communication activities that require quick access and work system integration. Both platforms have proven to support efficient, flexible, and sustainable online communication, and are an important part of digital transformation in education and organizations today and in the future.

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