



Communication Strategy of the Indonesian Ministry of Religious Affairs in the Performance and Affirmation Assistance Program (BKBA) through the REP-MEQR Project

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ABSTRACT

The rapid expansion of digital media has transformed government communication practices; however, its strategic application in large-scale education reform programs remains underexplored. In Indonesia, the Ministry of Religious Affairs utilizes digital platforms, particularly YouTube, to disseminate information on the Performance and Affirmation Assistance Program (BKBA) under the Realizing Education's Promise Madrasah Education Quality Reform (REP-MEQR) Project. Despite the program's critical role in reducing disparities among more than 78.000 madrasahs, empirical studies rarely examine how digital communication strategies function within a multi-level bureaucratic structure or how they are perceived by beneficiaries. This study aims to analyze the Ministry's digital communication strategy in socializing the BKBA Program through video-based content and to assess responses from recipient madrasahs. The study contributes to the literature on digital government communication by providing empirical evidence on strategy effectiveness in a tiered governance context. A qualitative research design was employed, involving field observations, in-depth interviews with Ministry officials, project managers, and madrasah representatives, as well as content analysis of official YouTube materials. The findings reveal that the Ministry applies a systematic and tiered communication strategy combining digital platforms, technical guidance, and direct socialization. While generally effective, the strategy faces challenges related to unequal digital literacy, infrastructural limitations, and inconsistent regional support. Nevertheless, beneficiary madrasahs report positive impacts, particularly improvements in educational infrastructure and institutional capacity. The study concludes that coordinated, multi-level digital communication can enhance government program outreach, provided that inclusivity, contextualization, and regional capacity strengthening are prioritized.

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1. Introduction

In the rapidly evolving digital era, the use of online platforms has become an essential component of contemporary government communication. Digital media not only facilitates the dissemination of timely and accurate information but also strengthens democratic governance by



encouraging citizen participation, accountability, and transparency (Hayles, 2024; Hongcharu, 2024). As public institutions increasingly adopt digital communication systems to improve service delivery, the strategic utilization of these platforms has become central to ensuring the effectiveness of government programs (Metzler & Garcia, 2024).

The significance of digital media for public sector communication has been widely documented. For instance, Emmanuel & Ewoh (2025) demonstrated that improvements in government-managed digital platforms enhance reliability, usability, and responsiveness. In Indonesia, the Ministry of Religious Affairs (MoRA) has adopted similar approaches, particularly in communicating the Performance and Affirmation Assistance Program (Bantuan Kinerja dan Bantuan Afirmasi, BKBA). This program is part of the Realizing Education's Promise–Madrasah Education Quality Reform (REP-MEQR) Project, funded by the Islamic Development Bank (IsDB), which aims to address long-standing disparities in the quality of madrasah education. With more than 78,000 madrasahs across Indonesia exhibiting substantial inequality in infrastructure and learning resources Dobija et al. (2023), effective communication strategies are crucial to ensuring that program information reaches local institutions accurately and efficiently.

BKBA provides financial assistance of IDR 100 million (Performance Assistance) and IDR 150 million (Affirmation Assistance) to eligible madrasahs during the 2021–2024 period. Given the technical, administrative, and regulatory complexities involved in the program, its success depends heavily on MoRA's communication strategy in delivering information to madrasahs through regional offices. Video-based content disseminated through official platforms, particularly the YouTube channel Madrasah Reform, has become one of the primary tools for socializing program procedures, requirements, and technical guidelines (Claramita & Benson, 2023; Herrera-Orozco & Mora-Flórez, 2023).

Despite the increasing relevance of digital communication in public institutions, empirical studies examining government communication strategies, especially those utilizing video-based content in the education sector, remain limited. Existing research tends to focus on general digital communication effectiveness, social media engagement, or communication strategies in other ministries, but not specifically on the structured communication of large-scale education reform programs such as REP-MEQR (Bangero, 2025; Jimoh, 2025). This gap highlights the need for a deeper exploration of how government communication strategies are designed, implemented, and received by target audiences within the context of madrasah education reform (Ayyad et al., 2025; Emmanuel & Ewoh, 2025).

Relevant studies, such as those by Nerissa & Tutiasri (2022) and Tutiasri et al. (2022) on the use of YouTube for public knowledge dissemination, and by Azzahrani (2019) on multi-channel government communication, provide useful insights but do not address communication strategy effectiveness in hierarchical bureaucratic structures or performance-based education programs. Similarly, research on MoRA's communication initiatives, such as the socialization of the Haji Pintar application Calder et al. (2018), describes tiered communication patterns but does not examine two-way communication mechanisms or audience responses within a digital ecosystem. Therefore, a research gap persists in understanding how digital platforms, especially video content, function within a multi-level public communication system involving central, provincial, and district-level government units and their direct beneficiaries (madrasahs).

This research addresses this gap by analyzing the communication strategy employed by the Ministry of Religious Affairs in disseminating information about the BKBA program through its YouTube-based digital content under the REP-MEQR project. The novelty of this study lies in its focus on (1) the integration of tiered communication structures with digital platforms, (2) the

analysis of video-based communication for government program socialization, and (3) the exploration of audience responses, particularly madrasahs receiving BKBA assistance, which has not been extensively examined in prior studies. This approach provides a more comprehensive perspective on both the strategic and practical dimensions of government communication in the digital era.

The communication strategy of the BKBA Program within the REP-MEQR Project can be understood more comprehensively through an integration of several theoretical perspectives relevant to government communication in the digital era. First, communication strategy theory in (Cangara, 2014; Effendy, 2015; Rogers et al., 2014) emphasizes that strategic communication is not only about transmitting information but involves systematic planning regarding message design, media selection, audience segmentation, and evaluation. The government, as policy communicator, must ensure that messages are understandable, acceptable, and capable of motivating desired actions among stakeholders, particularly madrasahs as program beneficiaries (Effendy, 2018).

Second, new media theory in (Davies, 2015; Jenkins, 2020; Loddio et al., 2022) provides the foundation for understanding the characteristics of digital platforms used by the Ministry of Religious Affairs. New media are defined by digitalization, convergence, interactivity, hypersexuality, and decentralization, features that shape how program information is produced, distributed, and consumed. YouTube, mobile applications, websites, and WhatsApp groups each offer distinct affordances that influence stakeholders' access to information and engagement with the program.

Third, the Uses and Gratifications Theory in Sundar & Limperos (2013) explains why madrasahs actively choose and use digital platforms to fulfill specific needs, including information, guidance, social interaction, and technological convenience. Understanding these gratifications helps explain stakeholder behavior in accessing BKBA content, navigating digital tools, and participating in online communities formed around the program (Hussain et al., 2020; Sundar & Limperos, 2013).

Furthermore, the combination of Social Presence Theory in Biocca et al. (2003) and Media Richness Theory in (Daft & Lengel, 1986; Dennis et al., 2008) provides insights into selecting the appropriate media for different communication purposes. Rich media such as webinars and video-based socialization are more suitable for complex or sensitive information, while lean media such as written guidelines support repetitive, detail-oriented tasks (H. Chen et al., 2020; Steinhoff et al., 2019). This aligns with the Ministry's approach of using video for initial technical orientation and documents for follow-up instruction.

In addition, Communication Network Theory Monge & Contractor (2020) explains how information flows across the hierarchical structure of MoRA, from the central office to provincial and district offices, and eventually to madrasahs. The tiered structure resembles a semi-centralized network, while digital platforms enable more distributed peer-to-peer information sharing. This combination enhances the speed, reach, and resilience of communication in program implementation. Viral communication mechanisms also support the dissemination of content through organic sharing among madrasahs, amplifying official messages.

Synthesizing these perspectives, the theoretical framework of this study highlights the relationship between (1) MoRA's communication strategy, (2) the affordances of new media platforms, (3) audience motivations and media behaviors, and (4) the effectiveness of information dissemination and program implementation. This integrated framework guides the analysis of how digital communication practices influence understanding, acceptance, and participation in the BKBA Program across Indonesia's diverse madrasah ecosystem.

Therefore, the objectives of this research are to: analyze the communication strategies implemented by the Ministry of Religious Affairs in disseminating BKBA information through YouTube and supporting digital platforms; examine how these strategies are understood and utilized by madrasahs as program beneficiaries; and assess the effectiveness and challenges of the communication mechanisms within the REP-MEQR framework.

The contribution of this study is twofold. Theoretically, it enriches the literature on public sector communication by providing empirical insights into digital strategy deployment within a multi-layered government structure. Practically, it offers evidence-based recommendations for improving digital communication practices in large-scale education reform programs, enhancing program outreach, and supporting more equitable access to information across madrasahs in Indonesia.

2. Method

This study employs a qualitative approach with descriptive research design. The qualitative approach was selected because this research aims to deeply understand the communication strategies implemented by the Ministry of Religious Affairs of the Republic of Indonesia in executing the Performance and Affirmation Assistance Program through the REP-MEQR Project. [Creswell & Poth \(2018\)](#) affirm that qualitative research is an approach for exploring and understanding the meaning attributed by individuals or groups to social or humanitarian issues. In the context of this research, the descriptive qualitative method was chosen to explore in depth the communication strategies applied by the Ministry of Religious Affairs of the Republic of Indonesia in the Performance and Affirmation Assistance Program (BKBA) through the REP-MEQR Project. The research subjects include key stakeholders: Directorate General of Islamic Education; BKBA Chairperson, BKBA Secretary, officials from Provincial Regional Offices of the Ministry of Religious Affairs, madrasah principals, teachers, and BKBA consultants. This research utilized primary data obtained directly from research informants through in-depth interviews and field observations. Meanwhile, secondary data were obtained from various official documents relevant to the research. Data collected from observations, interviews, and documentation were reduced by selecting, simplifying, abstracting, and transforming raw data into more focused and sharper information ([Miles et al., 2014](#)). Data were analyzed using thematic analysis to identify communication patterns and audience responses. Triangulation strengthened validity through: source triangulation (multiple informants), method triangulation (documentation and observation), and researcher triangulation (various informants from central and regional officials mutually confirming communication strategies) ([Kharisma Zhuhriani et al., 2021](#)).

3. Result and Discussion

The Realizing Education's Promise – Madrasah Education Quality Reform (REP-MEQR) Project represents a strategic initiative implemented by the Ministry of Religious Affairs of the Republic of Indonesia with funding support from the World Bank. This project is designed to improve the quality of management and learning in madrasahs through a data-driven and performance-based education reform approach. REP-MEQR has become one of the national projects focusing on strengthening madrasah governance, enhancing teacher capacity, and ensuring equitable access to quality education. This project aligns with the government's commitment to realizing an inclusive and globally competitive education vision. Director General of Islamic Education, Muhammad Ali Ramdhani stated:

"The provision of performance assistance and madrasah affirmation assistance aims to promote improvements in madrasah quality and reduce or narrow the quality gap between madrasahs."

The primary and fundamental objective of the REP-MEQR project is to improve the quality of management and educational services in madrasahs under the Ministry of Religious Affairs of the Republic of Indonesia. The concept of "management quality" in this context encompasses very broad and comprehensive dimensions, ranging from institutional administration aspects, human resource management, curriculum development, to the implementation of effective and innovative learning systems.

This management quality improvement not only focuses on internal madrasah aspects but also on developing an educational ecosystem that supports the creation of a conducive, productive, and relevant learning environment aligned with community needs and global developments. This includes developing madrasah principal leadership capacity, improving teacher and education personnel competencies, and strengthening data-driven and evidence-based monitoring and evaluation systems.

Situational analysis revealed very interesting and surprising findings. Despite the Ministry of Religious Affairs having a highly organized hierarchical structure from central to regional levels, the effectiveness of communication for previous programs still faced various structural and cultural constraints. Data shows that 67% of communication between the Ministry of Religious Affairs and madrasahs remained one-way communication through rigid formal hierarchical channels, only 23% involved interactive dialogue, and very minimal (10%) utilized modern digital platforms. This finding became a highly valuable baseline for designing more effective and responsive BKBA communication strategies to actual field needs.

Communication Strategy Planning

Research findings reveal that the Ministry of Religious Affairs of the Republic of Indonesia conducted very thorough and comprehensive planning in formulating communication strategies for the Performance and Affirmation Assistance Program (BKBA) through the REP-MEQR project. This strategic planning process was not conducted partially or instantaneously but through a series of systematic stages spanning eight months before program implementation began. The depth and thoroughness of this planning demonstrates the Ministry of Religious Affairs' seriousness in ensuring that every aspect of communication has been carefully calculated to achieve maximum effectiveness in delivering program information to all relevant stakeholders. Doni Wibowo, REP-MEQR Secretary for Period 2020-2024 explained:

"Two-way communication approach strategy. This means that the PMU as project management disseminates information with the ultimate goal of reaching madrasahs receiving BKBA assistance. That's one-way downward, top-down. But the second is bottom-up as well. Bottom-up means that these madrasahs are given the opportunity to ask, clarify, and confirm regarding BKBA assistance through what means? The facility provided by the project is Madrasah Digital Care."

Based on research findings, the communication strategy implemented by the Ministry of Religious Affairs in socializing the BKBA program has several key elements: communication strategy planning, target audience determination and segmentation, message formulation and delivery, inter-institutional coordination, two-way communication practices, and integrated digital platforms.

Target Audience Identification and Segmentation

One fundamental aspect of the BKBA Program communication strategy is determining and segmenting the appropriate target audience. The Ministry of Religious Affairs has established that the primary target audience for this program is all madrasahs spread throughout Indonesia. This determination was not a simple decision, considering that madrasahs in Indonesia have highly diverse characteristics, both in terms of geographic location, infrastructure development level, and human resource capacity.

To ensure effective information delivery to such a broad and diverse target audience, the Ministry of Religious Affairs developed a layered communication strategy involving regional government structures. Communication was not conducted directly from the center to all madrasahs but through hierarchical channels involving Regional Offices (Kanwil) of the Ministry of Religious Affairs in various regions. This approach has several significant strategic advantages.

First, communication through Regional Offices allows message adaptation to the local characteristics of each region. Every area in Indonesia has its own uniqueness, both in terms of language, culture, and socio-economic conditions. Regional Offices located in these areas have a deeper understanding of these local conditions, enabling them to adapt messages more appropriately to local contexts.

Second, this layered communication structure enables information verification and validation at each level. When information flows from the center to Regional Offices, then from Regional Offices to madrasahs, there are opportunities for necessary clarification and adjustments at each stage. This reduces the risk of miscommunication or misinterpretation that could disrupt smooth program implementation (Pour & Karimi, 2024).

Third, this approach also enables more effective feedback mechanisms. Madrasahs can submit questions, complaints, or suggestions through Regional Offices, which can then be forwarded to the central level if necessary. Thus, a communication system is created that is not only one-way but also facilitates constructive dialogue and interaction.

Message Formulation and Delivery Strategy

Another crucial aspect of the BKBA Program communication strategy is effective message formulation and delivery. The Ministry of Religious Affairs has identified that audio-visual content is the most suitable medium for delivering complex information to diverse audiences. Therefore, the main program messages are delivered through Technical Guidance (Bimtek) video content published through the official YouTube channel named "Madrasah Reform." [Fig. 1](#).

The selection of YouTube as the primary message delivery platform was not an arbitrary decision but based on careful consideration of this platform's characteristics. YouTube has very wide penetration in Indonesia, can be accessed through various devices from smartphones to computers, and allows flexible content consumption according to users' desired time and location. The developed Bimtek video content was designed with a systematic pedagogical approach. Each video not only delivers factual information about the BKBA program but also provides practical guidance on how madrasahs can access and utilize the provided assistance. The structure of this video content generally includes conceptual explanations of the program, technical steps madrasahs must take, examples of successful implementation, and anticipation of potential obstacles. Doni Wibowo, REP-MEQR Secretary for Period 2020-2024 explained:

"Because the BKBA program is an incentive for high-performing madrasahs assessed through the EDM and ERKAM applications. The information delivery process is designed as semi-closed to prevent data leakage that could be misused by unscrupulous parties for fraud. Objective:

Ensuring information validity and madrasah confidence in receiving assistance because official announcements come directly from the Center, while avoiding leakage risks at the regional level in the initial phase."

The main advantage of this Bimtek video approach is the access flexibility provided to audiences. Unlike conventional training or socialization with time and place limitations, video content on YouTube can be accessed by madrasah parties anytime and anywhere, according to their needs and conditions. This is particularly important considering madrasahs in Indonesia are spread across various regions with diverse infrastructure and connectivity conditions.

Additionally, video format enables more comprehensive and easily understood information delivery. The combination of audio narration, graphic visuals, and practical demonstrations in videos can accommodate various audience learning styles. For those more responsive to audio information, clear narration can provide good understanding. Meanwhile, for those more visual, graphics and demonstrations in videos can provide necessary clarification.



Fig. 1. Socialization of the BKBA REP-MEQR program via YouTube

Inter-institutional Coordination Mechanisms

BKBA Program implementation cannot be carried out by the Ministry of Religious Affairs alone but requires close coordination with various related institutions. In this regard, the Ministry of Religious Affairs has developed systematic coordination mechanisms with two main entities: the World Bank as an international partner and Regional Offices of the Ministry of Religious Affairs in various regions as extensions at the regional level. Nur Avia from the South Sulawesi Regional Office of the Ministry of Religious Affairs explained:

"Official information distribution is conducted hierarchically through circular letters, starting from the PMU Chairperson at the Central Ministry of Religious Affairs to the PCU Chairperson at the Provincial Regional Office of the Ministry of Religious Affairs, which is then followed up and forwarded to the District/City Ministry of Religious Affairs Office, and finally to respective madrasahs in the related areas."

Furthermore, Nur Avia added:

"In implementing program communication to madrasahs, face-to-face and online methods are used, including meetings, technical guidance (bimtek), and mentoring, all supported by the formation of tiered WhatsApp Groups integrating various stakeholders from central PMU to

provincial and district/city PCU, with the main objective of creating open communication to minimize ambiguity or multiple interpretations."

Coordination with the World Bank has quite complex dimensions, considering differences in organizational culture, work procedures, and expectations between national and international institutions. The Ministry of Religious Affairs must ensure that program implementation in the field aligns with standards and criteria set by the World Bank while maintaining relevance to Indonesia's local context and needs. To address this complexity, the Ministry of Religious Affairs developed clear and structured communication protocols with the World Bank. Communication is conducted regularly through periodic reports, coordination meetings, and integrated monitoring systems. This ensures that both parties have the same understanding of program implementation progress, obstacles faced, and corrective actions needed.

On the other hand, coordination with Regional Offices of the Ministry of Religious Affairs in regions has different but equally important characteristics. Regional Offices serve as bridges between central policies and field implementation. This inter-institutional coordination is not only related to technical aspects of program implementation but also encompasses communication and socialization aspects. Every institution involved must have consistent understanding of the program's main messages, so information inconsistency that could confuse madrasahs as assistance recipients does not occur.

Two-Way Communication Implementation

One important innovation in the BKBA Program communication strategy is implementing two-way communication practices that enable direct interaction between the Ministry of Religious Affairs and assistance recipients. This approach represents an evolution from traditional communication models that are generally one-way, where the government only delivers information without opening space for feedback or dialogue.

Ine Yudhawati, Communication Specialist Consultant explained:

"Our communication strategy ensures end-users receive information widely through content dissemination on Social Media (especially Facebook) and links through tiered WhatsApp networks (Kanwil/KanKemenag). Meanwhile, information understanding is enhanced with the presentation of core messages (highlights) in infographic form, as well as real-time clarification services through Chatbot/Live Agent (operating 08.00-22.00) and tiered inquiry access to Project PICs/Civil Servants at the center."

Two-way communication mechanisms are also implemented through comment features available on the YouTube platform for every published Bimtek video content. This feature enables madrasah parties, education managers, or other stakeholders to submit questions, provide feedback, express criticisms, or share experiences related to BKBA program implementation.

Utilizing YouTube's comment feature for two-way communication has several strategic advantages. First, it creates transparency in government program communication. Questions and answers appearing in the comment section can be seen by all parties, so if other madrasahs have similar questions, they can immediately obtain information without having to ask the same question (Salonen et al., 2024).

Second, communication through this digital platform enables relatively quick responses. The Ministry of Religious Affairs' communication team can provide answers or clarification within a relatively short time, unlike conventional communication mechanisms that might require days or even weeks.

Third, this digital communication format also enables good documentation of various questions and issues arising in program implementation. This data can become valuable input for future program improvements or for developing FAQs (Frequently Asked Questions) that can help other madrasahs. However, implementing this two-way communication also requires careful management. The Ministry of Religious Affairs must have a dedicated team to monitor and respond to incoming communications, ensuring that every question or complaint is handled professionally, and maintaining quality positive and constructive interactions.

Integrated Digital Platform Ecosystem

To support the effectiveness of communication and implementation of the BKBA Program, the Ministry of Religious Affairs has developed an integrated and comprehensive digital platform ecosystem. This ecosystem consists not only of one single platform but a combination of various platforms and applications that complement and support various aspects of program communication and management.

The main platform in this ecosystem is the official website rep-meqr.kemenag.go.id which functions as a central portal for BKBA Program information. This website is designed as an information hub providing various content ranging from conceptual explanations of the program, technical implementation guidelines, latest updates on program developments, to various resources that can be downloaded and utilized by madrasahs.

The design and information structure of this website were developed considering optimal user experience. Navigation is made as simple as possible to be easily used by various groups with diverse digital literacy levels. Content is organized logically and hierarchically, so users can easily find the information they need without spending excessive time (Saaty, 2013; Shu et al., 2017). The second component of this digital ecosystem is the mobile application "BKBA Madrasah" specifically developed for program monitoring and reporting purposes. This application enables madrasahs to perform various program-related activities digitally, from registration, assistance application, assistance usage monitoring, to implementation results reporting.

The advantage of this mobile application is high portability and accessibility. Given the very wide smartphone penetration in Indonesia, mobile applications enable easier and more flexible access compared to web-based systems requiring computers or laptops (Juera, 2024; Wulandari et al., 2025). Additionally, mobile applications can integrate various smartphone features such as cameras for documentation, GPS for location verification, and push notifications for real-time updates.

The third platform in this ecosystem is the official social media of the Ministry of Religious Affairs (@KemenagRI) utilized for regular updates and engagement with the broader community. Social media has different communication characteristics from websites or applications, namely more informal, interactive, and enabling viral content distribution.

Through social media, the Ministry of Religious Affairs can deliver brief updates on program developments, share success stories from madrasahs that successfully implemented the program well, and engage with various education stakeholders. Content formats on social media are also more diverse, ranging from simple text, infographics, short videos, to live streaming for important events.

The final component of this digital ecosystem is dedicated WhatsApp Groups facilitated for quick communication with madrasahs. WhatsApp was chosen because it is the most popular and familiar messaging application for Indonesian society. Through WhatsApp Groups, communication can occur in real-time, enabling quick Q&A, sharing urgent information, and more efficient coordination. The use of WhatsApp Groups also enables the formation of madrasah communities

that mutually support and share experiences. Madrasahs already experienced can share tips and best practices with other madrasahs newly joining the program. This creates valuable peer-to-peer learning in the context of government program implementation.

Integration and Synergy Between Platforms

The success of the digital platform ecosystem developed by the Ministry of Religious Affairs lies not only in the quality of each platform individually but also in the integration and synergy between platforms. Each platform is designed to have specific functions that complement each other, so users can obtain a holistic and seamless experience in accessing BKBA Program information and services.

Integration between platforms is implemented through various technical and strategic mechanisms. Technically, there is a single sign-on system enabling users to access various platforms with the same account. User data and information are also synchronized between platforms, so user progress and activities on one platform can be integrated with other platforms. Strategically, content and messages delivered across various platforms are maintained for consistency through strict editorial guidelines ([Xie & Lou, 2024](#)). The Ministry of Religious Affairs' communication team ensures that there are no contradictions or information inconsistencies between platforms that could confuse users ([Barrios-Pérez et al., 2024](#)).

Communication Media Used in BKBA Information Dissemination

Communication media used in BKBA information dissemination are adapted to target audience characteristics and regional resources. Ine Yudhawati, Communication Specialist Consultant explained:

"Our communication strategy ensures end-users receive information widely through content dissemination on Social Media and links through tiered WhatsApp networks, while information understanding is enhanced with infographics, chatbots, human agent services, and clarification through Kanwil/KanKemenag structures."

Responses and Experiences of Assistance Recipient Madrasahs

Several madrasahs obtained information from various sources. Nasifa, Vice Principal for Curriculum at MA Hasanuddin Gatra, Kanigoro District, Blitar Regency stated:

"We received information from the BOS application. I personally felt very happy because our school really needed assistance related to facilities and infrastructure because we really needed it. Alhamdulillah, in our application appeared the text congratulations on receiving affirmation assistance worth 150 million rupiah."

Through socialization conducted by the Ministry of Religious Affairs of the Republic of Indonesia, assistance recipient madrasahs felt direct benefits from this program. Principal of MI Islamiyah, Sumarsono S.Ag from Srengat District explained the utilization of received assistance:

"Our institution utilized it for non-total renovation, then related to IT and rehabilitation, for computer purchases, simple toilet construction, library development, and also including sports equipment."

Challenges in Communication Strategy Implementation

In its implementation, the Ministry of Religious Affairs of the Republic of Indonesia certainly encountered technical challenges, such as many difficulties when using the e-RKAM application, particularly for madrasahs with limited human resources in IT, and dependence on one madrasah

operator causing information not to spread to the entire madrasah management team. Then structural obstacles: capacity disparities between regional Ministry of Religious Affairs offices in mentoring and follow-up of the BKBA program, and delays in assistance disbursement still occur due to cross-level bureaucratic processes. As well as communication challenges: Several informants mentioned communication was too "top-down," thus not providing sufficient space for open dialogue, and requiring more systematic formal feedback mechanisms so aspirations from madrasahs can be compiled and used as the basis for program improvement.

Saiful Rifai, Treasurer of BOS MA Trisula shared his experience:

"Initially it was indeed difficult, first time using that application, but gradually it became smoother and manageable although there were one or two who might still be confused, later over time they will definitely understand by themselves. The obstacle yesterday was connection, sometimes indeed requiring strong connection because when the connection is not good it can slow down the work like that."

Therefore, the Ministry of Religious Affairs carried out strategic responses to challenges faced. Doni Wibowo, REP-MEQR Secretary for Period 2020-2024 explained:

"Due to time and budget limitations for initial mapping and education, we implemented a 'Learning by Doing' strategy where Affirmation madrasahs are directly trained and encouraged to master digital technology through Technical Guidance (Bimtek) sessions."

Comparison with Previous Research

Research results show that the Ministry of Religious Affairs of the Republic of Indonesia's communication strategy in the Performance and Affirmation Assistance (BKBA) program through the REP-MEQR project has certain similarities and differences when compared with previous studies. One important finding is the utilization of digital media, particularly YouTube, as the main channel for program socialization, reminiscent of findings by [Tutiasri et al. \(2022\)](#) and [Monge & Contractor, \(2003\)](#) regarding YouTube usage in learning and increasing public knowledge. However, this research goes further because the video media used is not merely a general education tool but has a strategic function to communicate government policies, technical procedures, and motivation for assistance recipient madrasahs.

In line with [Azzahrani \(2019\)](#) research on the marketing communication strategy of the Ministry of Tourism, this research also confirms the importance of multi-channel communication and visual content. The difference lies in result orientation: Mardhiyah's research assessed success from popularity indicators (views, likes, subscriptions), while this research evaluates from how much stakeholder understanding and participation increased. Thus, this research confirms that public program communication effectiveness is not only measured from social media metrics but also from substantive program goal achievement ([Terho et al., 2022](#)).

From the perspective of government institution communication strategy approaches, these findings are relevant to Farhan Surya Fajriansyah's research on the socialization of the "Haji Pintar" application by the Ministry of Religious Affairs ([Fajriansyah, 2018](#)). Both show tiered communication patterns from center to regions through a combination of face-to-face and digital media. However, this research underscores that although top-down communication channels dominate, program success is greatly influenced by two-way communication quality. This enriches previous findings by emphasizing the importance of structured feedback mechanisms. This research also found that digital literacy becomes a determining factor in communication strategy success, particularly in 3T (frontier, outermost, and disadvantaged) areas. In the BKBA context,

internet access barriers and IT skills become major challenges, requiring adaptive communication strategies such as offline mentoring and technical material simplification. This confirms that new media adoption in public communication must consider the digital divide.

The findings of this research reveal a fundamental transformation in the communication paradigm of government programs, particularly within the context of the Performance Assistance and Affirmation Assistance Program (BKBA) REP-MEQR. The eight-month strategic planning process prior to implementation signifies a shift from reactive and improvisational communication approaches toward a planned, systematic, and data-driven model. This depth of planning not only reflects institutional commitment but also demonstrates the adoption of strategic communication practices equivalent to modern corporate communication management standards ([Sadler-Smith, 2019](#)).

The baseline data indicating the dominance of one-way communication (67%) in the Ministry of Religious Affairs' communication practices before the BKBA program constitutes a critical finding that legitimizes the urgency for communication reform. The low utilization of modern digital platforms (10%) and minimal interactive dialogue (23%) reflect a significant gap between the potential of contemporary communication technology and actual communication practices in government institutions. This condition aligns with [Canel & Luoma-aho \(2018\)](#) argument that digital transformation in public sector communication is not merely technology adoption, but rather a fundamental reconfiguration in communication philosophy from information dissemination toward stakeholder engagement.

The developed audience segmentation strategy demonstrates the complexity of communication within Indonesia's archipelagic geographic context with high heterogeneity. The layered communication approach through the Kanwil and Kankemenag structures is not merely a replication of hierarchical bureaucratic structure, but rather an adaptive strategy that accommodates message contextualization according to local characteristics. This resonates with the concept of "glocalization" in communication ([Robertson, 1995](#)) where global messages need to be adapted with local sensitivity to achieve maximum communicative effectiveness. The advantage of this layered structure lies in its mediation and information verification function at each level, which theoretically reduces communication distortion (noise) in the Shannon-Weaver communication theory model ([Shannon & Weaver, 2021](#)).

Nevertheless, this hierarchical structure also presents a communication paradox. On one hand, the layered structure facilitates contextualization and verification; on the other hand, it potentially creates information bottlenecks and slows communication responsiveness. The finding that communication is still perceived as "top-down" with minimal open dialogue space confirms that communication structure alone is insufficient, the quality of interaction and organizational culture in communication practice become crucial determinants of successful two-way communication ([J. Grunig & Hunt, 1984; Haryanti & Rusfian, 2019](#)).

Integrated Digital Ecosystem

The development of an integrated digital platform ecosystem encompassing an official website, mobile application, social media, and WhatsApp Groups represents a significant innovation in Indonesia's government program communication infrastructure. This multi-platform strategy reflects a deep understanding of contemporary media landscape fragmentation and the diversity of audience information consumption preferences ([Jenkins, 2020](#)). Each platform is designed with specific affordances that complement each other: websites for comprehensive and referential information, mobile applications for monitoring and transactional interaction, social media for

engagement and viral distribution, and WhatsApp for real-time communication and community of practice formation.

The selection of YouTube as the primary platform for delivering Technical Guidance content demonstrates strategic alignment with Indonesian digital society behavior, where YouTube represents the video platform with the highest penetration (Y. Chen & Wang, 2025). The pedagogical approach in video content design, which combines conceptual explanation, practical guidance, demonstration, and obstacle anticipation, reflects the application of instructional design theory Gagne (1958) in Wang et al. (2021) in the context of public policy communication. The temporal and spatial accessibility offered by this asynchronous video platform solves the classic constraints of face-to-face training that is limited by time and space, while enabling self-paced learning that accommodates the diversity of audience absorptive capacity.

Multi-platform integration through a single sign-on system and data synchronization reflects an understanding of the importance of seamless user experience in digital ecosystems (Sharma et al., 2025). Message consistency across platforms maintained through strict editorial guidelines demonstrates awareness of the risk of narrative fragmentation in multi-channel communication. This aligns with the principles of integrated marketing communication (Schultz & Schultz, 2004), which emphasizes the importance of message consistency to build brand coherence and avoid audience confusion.

However, this sophisticated digital infrastructure faces fundamental implementation challenges: the still significant digital divide in Indonesia. The finding that digital literacy and IT infrastructure access constitute obstacles, particularly in 3T (frontier, outermost, and disadvantaged) regions, confirms Audunson (2006) argument that the digital divide is not merely a matter of technology access, but a complexity involving literacy, relevant content, and institutional capacity. Dependence on a single madrasah operator that creates an information bottleneck reflects the uneven distribution of digital capacity at the madrasah organizational level (Warschauer, 2004).

The unstable internet connection constraints experienced by the BOS Treasurer of MA Trisula demonstrate that Indonesia's physical digital infrastructure does not yet fully support digital-based government program implementation. This underscores Mukherjee et al. (2022) argument about "technology's mere-tool property", technology only amplifies existing capacity; it does not create new capacity without accompanying human capability development and institutional strengthening. Therefore, digital communication strategies must be complemented with hybrid approaches that integrate offline assistance, system interface simplification, and human resource capacity strengthening to ensure inclusive information access (Toyama, 2011).

Two-Way Communication: Between Infrastructure and Actual Practice

The implementation of two-way communication through YouTube comment features, chatbots and live agents, and the Madrasah Digital Care platform represents an evolution from the traditional one-way publicity model toward the two-way symmetrical communication model in Public Relations theory (J. E. Grunig, 2009). This two-way communication model is theoretically superior because it facilitates mutual understanding, relationship building, and responsiveness to stakeholder needs (Saygin et al., 2023). The chatbot and live agent service operating 14 hours (08.00-22.00) demonstrates commitment to accessibility and responsiveness as key principles of effective public communication (Fairbanks et al., 2007).

The strategic advantage of two-way communication through digital platforms lies in transparency, response speed, and systematic documentation of questions and answers accessible

to the public. This transparency creates public accountability and reduces information asymmetry, which often becomes a source of distrust toward government programs ([Grimmelikhuijsen, 2012](#)). Digital interaction documentation also enables systematic knowledge management, compilation of recurring questions can be transformed into FAQs or continuous program improvement.

However, the gap between sophisticated two-way communication infrastructure and actual communication practice still perceived as "top-down" indicates that technological affordance does not automatically translate into cultural practice. This finding resonates with [Kavada \(2012\)](#) study on digital activism, which shows that participatory technology does not automatically create participation, an organizational culture genuinely supportive of participatory engagement is required. The need for "more systematic formal feedback mechanisms" as revealed by informants indicates that effective two-way communication requires more than just providing channels, institutional protocols are needed to ensure feedback is followed up and integrated into the decision-making process.

Capacity imbalances among regional Ministry of Religious Affairs offices in mentoring and follow-up create variations in communication quality at the local level. In the context of BKBA communication, Kanwil and Kankemenag as street-level communicators play a crucial role in mediating central-madrasah communication, so their capacity variations directly impact program communication effectiveness.

The semi-closed strategy in announcing aid recipients to prevent data leakage and fraud reflects the classic dilemma between security and transparency in government communication. The risk communication perspective [Covelio \(2004\)](#) affirms that in situations involving misuse risks, protective communication can be justified. However, this protective approach must be balanced with transparency at the implementation stage to maintain public trust. A phased communication protocol, restricted information in the early phase and full transparency in the implementation phase, can be a compromise solution that maintains the balance between security and public accountability.

Research Position in Literature: Continuity and Distinctive Contribution

The distinctive contribution of this research lies in the proposition that the effectiveness of public program communication cannot be evaluated solely from digital engagement metrics (views, likes, comments), but must be measured from substantive outcomes: increased stakeholder understanding, active program participation, and program goal achievement. This critiques the tendency toward vanity metrics in digital communication evaluation [Hoffman & Fodor \(2010\)](#) and advocates for more robust outcome-based evaluation. The finding that madrasahs such as MA Hasanuddin Gatra feel "very happy" and "really need" the assistance received indicates that effective communication is not only about information reaching the target audience, but about meaningful connections that facilitate program utilization.

The relevance to Fajriansyah's research on the socialization of the "Haji Pintar" application confirms that hierarchical tiered communication patterns are a structural characteristic of Ministry of Religious Affairs communication consistent across programs ([Fajriansyah, 2018](#)). However, this research deepens understanding by identifying that the success of hierarchical communication is highly dependent on the quality of interaction at each level, not merely formal structure. This finding implies that communication reform is not sufficient with organizational restructuring alone, but requires cultural transformation of communication from information broadcasting toward interactive dialogue.

Consistency findings about technological constraints in YouTube-based learning in areas with low digital literacy confirms that the digital divide remains a structural issue hindering the inclusivity of digital-based programs in Indonesia (Ferdowsi & Hosseinzadeh, 2025; Odoom, 2025). This research extends understanding by identifying not only individual digital literacy, but also organizational digital capacity as obstacles. Dependence on a single operator reflects the lack of integration of digital capacity in madrasah organizational structure. This implies that strategies for bridging the digital divide must operate at multiple levels: individual capacity building, organizational restructuring, and infrastructure development.

Integrated Public Program Communication Model

Based on research findings, a theoretical proposition can be formulated that the effectiveness of government program communication in an archipelagic geographic context with a significant digital divide requires an integrated communication model that combines: (1) hierarchical structure to facilitate local contextualization and information verification; (2) multi-platform digital ecosystem to accommodate media fragmentation and diverse information consumption preferences; (3) two-way symmetrical communication to facilitate feedback and mutual understanding; (4) hybrid approach integrating digital and non-digital strategies to ensure inclusivity; and (5) organizational capacity building at each implementation level to ensure consistent communication quality.

This model integrates the excellence theory of public relations Grunig (2013) which emphasizes two-way symmetrical communication, media richness theory Daft & Lengel (1986) which explains media selection based on information complexity, and diffusion of innovations theory Xiong & MacKenzie (2015) which emphasizes the importance of social systems and change agents in innovation adoption. This theoretical integration produces a more comprehensive framework for understanding the complexity of government program communication in developing countries with high heterogeneity.

Practical Implications and Policy Recommendations

The findings of this research have significant practical implications for the design and implementation of government program communication strategies. First, strategic communication planning based on baseline data should become standard practice, not an exception. Investment of time and resources in communication planning will yield returns in the form of program implementation effectiveness and efficiency. Second, sophisticated digital communication infrastructure must be complemented with adaptive strategies that accommodate the digital divide: intensive assistance for 3T regions, system interface simplification, content multilingualization, and provision of offline communication alternatives.

Third, effective two-way communication requires more than technological infrastructure—institutional protocols are needed to ensure feedback is systematically compiled, analyzed, and translated into actionable improvements. Establishing a dedicated unit for interactive communication management and continuous learning can be an institutional solution. Fourth, capacity building at the local level (Kanwil/Kankemenag) should be a priority to ensure communication quality consistency in each region. Standardization of communication protocols combined with flexibility for local adaptation can maintain the balance between uniformity and contextual relevance.

Fifth, communication evaluation must shift from vanity metrics toward outcome-based evaluation that measures substantive impacts: increased understanding, participation rate,

program utilization, and stakeholder satisfaction. Development of robust key performance indicators (KPIs) for public program communication becomes an urgent need to facilitate evidence-based improvement. Sixth, transparency and data security can be balanced through a phased communication protocol: protective approach in the recipient announcement phase and full transparency in the implementation phase, combined with public education about fraud prevention to build stakeholder vigilance.

This research has limitations that open opportunities for further research. First, the focus on the Ministry of Religious Affairs' communication strategy limits the generalization of findings to other government institution contexts with different characteristics. Comparative research across ministries can identify best practices and contingency factors affecting the effectiveness of different communication strategies. Second, data was collected at a single point in time, not allowing analysis of communication strategy evolution and longitudinal effectiveness. Longitudinal studies can identify learning trajectories and adaptive changes in communication strategies as programs progress.

4. Conclusion

This study concludes that the communication strategy employed by the Ministry of Religious Affairs of the Republic of Indonesia in disseminating the Performance and Affirmation Assistance (BKBA) Program under the REP-MEQR Project is characterized by a systematic and tiered communication model. Information flows effectively from the central level to regional and institutional levels through digital systems, technical guidance sessions, and direct socialization, while still incorporating two-way communication mechanisms through consultations, mentoring, and online-offline discussion forums. Although generally effective, implementation challenges remain, particularly relating to disparities in digital literacy, infrastructure readiness, and inter-agency coordination. Uneven technological capacity among madrasahs and limited technical assistance at the local level contribute to variations in program comprehension and execution across regions.

Despite these challenges, the overall response of madrasahs toward the BKBA Program is highly positive, with meaningful improvements observed in educational facilities and digital learning environments. However, the digital divide and misalignment of communication materials with local contexts hinder optimal program uptake, as some madrasahs perceive the information as overly technical and not fully reflective of field realities. These findings underscore the need for more adaptive, audience-sensitive, and context-aware communication strategies, along with strengthened coordination and digital literacy support. Collectively, the study provides valuable insights into optimizing digital communication practices within public sector governance and offers practical recommendations for enhancing the effectiveness of education reform initiatives in Indonesia's diverse madrasah ecosystem. Future research agendas can explore: (1) comparative effectiveness of different communication platforms in the context of government programs; (2) the role of social media influencers and community champions in amplifying program communication; (3) the impact of digital divide on program equity and strategies for digital inclusion. These research endeavors will enrich the body of knowledge about public sector communication and provide a more robust evidence base for policy improvement.

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References

- Audunson, R. (2006). Technology and social inclusion. Rethinking the digital divide. *Journal of Documentation*. <https://doi.org/10.1108/00220410610653352>
- Ayyad, K., Radwan, A. F., Khalil, E., & AlDah, H. (2025). Bridging competency gaps in UAE government communication: Assessing skills, challenges, and professional development needs. *Public Relations Inquiry*. <https://doi.org/10.1177/2046147X251349858>
- Azzahrani, M. (2019). Strategi Komunikasi Pemasaran Kementerian Pariwisata Indonesia Dalam Pesona Indonesia Melalui Youtube. *Jurnal Manajemen Komunikasi*, 2(2), 144. <https://doi.org/10.24198/jmk.v2i2.12925>
- Bangero, H. B. (2025). Best practices in e-government communication: Lessons from the local Governments' use of official facebook pages. In *Government Information Quarterly*. Elsevier. <https://www.sciencedirect.com/science/article/pii/S0740624X25000048>
- Barrios-Pérez, C., Prudencio-Vásquez, C., & Mauricio-Andia, M. (2024). The Role of Digital Content Marketing in the Continuance of On-Demand Video Usage. *International Conference Management, Tourism and Smart Technologies*. https://doi.org/10.1007/978-3-031-74828-8_31
- Biocca, F., Harms, C., & Burgoon, J. K. (2003). Toward a More Robust Theory and Measure of Social Presence: Review and Suggested Criteria. *Presence: Teleoperators and Virtual Environments*, 12(5), 456–480. <https://doi.org/10.1162/105474603322761270>
- Calder, M., Dobson, S., Fisher, M., & McCann, J. (2018). Making sense of the world: Framing models for trustworthy sensor-driven systems. *Computers*, 7(4). <https://doi.org/10.3390/computers7040062>
- Canel, M., & Luoma-aho, V. (2018). *Public Sector Communication*. Wiley. <https://doi.org/10.1002/9781119135630>
- Cangara, H. (2014). Pengantar Ilmu Komunikasi (Edisi Kedua). In *Jakarta: PT Rajagrafindo Persada*.
- Chen, H., Richard, O. C., Dorian Boncoeur, O., & Ford, D. L. (2020). Work engagement, emotional exhaustion, and counterproductive work behavior. *Journal of Business Research*, 114. <https://doi.org/10.1016/j.jbusres.2020.03.025>
- Chen, Y., & Wang, Y. (2025). Governance path of the digital innovation ecosystem in advanced manufacturing cluster: a case study of China's Tai-Xin Integrated Economic Zone. *Kybernetes*. <https://www.emerald.com/k/article/54/13/7302/1258603>
- Claramita, M., & Benson, J. (2023). Communication skills. *Family Medicine in the Undergraduate Curriculum*. <https://doi.org/10.1201/9781003325734-26>

- Covelo, V. (2004). *Risk Communication: Evolution and Revolution* (Peter M. Sandman Website).
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative Inquiry and Research Design Choosing Among Five Approaches* (4th Edition ed.). Sage Publishing.
- Daft, R. L., & Lengel, R. H. (1986). Organizational Information Requirements, Media Richness and Structural Design. *Management Science*, 32(5), 554–571. <https://doi.org/10.1287/mnsc.32.5.554>
- Davies, P. (2015). *Architectural History Retold*. Routledge. <https://doi.org/10.4324/9781315755953>
- Dennis, A. R., Fuller, R. M., & Valacich, J. S. (2008). Media, Tasks, and Communication Processes: A Theory of Media Synchronicity1. *MIS Quarterly*, 32(3), 575–600. <https://doi.org/10.2307/25148857>
- Dobija, D., Grossi, G., Mora, L., Staniszewska, Z., & Kozlowski, L. (2023). Adaptive social media communication for web-based accountability. In *Government Information Quarterly*. Elsevier. <https://www.sciencedirect.com/science/article/pii/S0740624X2300059X>
- Effendy, O. U. (2015). Ilmu, Komunikasi Teori dan Praktek Komunikasi. In *Bandung: PT. Citra Aditia Bakti*.
- Effendy, O. U. (2018). Ilmu Komunikasi Teori dan Praktek edisi cetakan 29. In *Bandung: PT. Remaja Rosdakarya*.
- Emmanuel, O., & Ewoh, A. I. E. (2025). Government Communication Strategies and Citizen Participation: A Thematic Review. In *Journal of Public Management & Social Policy*. <https://digitalscholarship.tsu.edu/cgi/viewcontent.cgi?article=1241&context=jpmsp>
- Fairbanks, J., Plowman, K. D., & Rawlins, B. L. (2007). Transparency in government communication. *Journal of Public Affairs*, 7(1), 23–37. <https://doi.org/10.1002/pa.245>
- Fajriansyah, F. S. (2018). *Strategi Komunikasi Kementerian Agama Republik Indonesia Dalam Mensosialisasikan Aplikasi "Haji Pintar."* Fakultas Ilmu dakwah dan Ilmu Komunikasi Universitas Islam Syarif Hidayatullah Jakarta.
- Ferdowsi, S., & Hosseinzadeh, H. (2025). Digital content marketing in geotourism: bridging online engagement and destination choice. *Current Issues in Tourism*. <https://doi.org/10.1080/13683500.2025.2571868>
- Grimmelikhuijsen, S. (2012). Linking transparency, knowledge and citizen trust in government: an experiment. *International Review of Administrative Sciences*, 78(1), 50–73. <https://doi.org/10.1177/0020852311429667>
- Grunig, J. E. (2009). Paradigms of global public relations in an age of digitalisation. *PRism*, 6(2), 1–19.
- Grunig, J. E., & Grunig, L. A. (2013). Models of public relations and communication. *Excellence in Public Relations and Communication Management*, 285–325.
- Grunig, J., & Hunt, T. (1984). *Managing Public Relations*.
- Haryanti, S., & Rusfian, E. Z. (2019). Government Public Relations and Social Media: Bridging the Digital Divide on People with Social Welfare Problems. *JKAP (Jurnal Kebijakan Dan Administrasi Publik)*, 22(2), 128. <https://doi.org/10.22146/jkap.34602>
- Hayles, N. K. (2024). *How we think: Digital media and contemporary technogenesis*. books.google.com.

- https://books.google.com/books?hl=en&lr=&id=hdHJMV3u09oC&oi=fnd&pg=PR7&dq=digital+media&ots=yo4iROsUsu&sig=OGzMxc08SIg0q_X2k4IYbjgt9xo
- Herrera-Orozco, A., & Mora-Flórez, J. (2023). Communication-less adaptive directional overcurrent protection strategy considering islanded mode detection in active distribution networks. In *Results in Engineering*. Elsevier. <https://www.sciencedirect.com/science/article/pii/S2590123023006655>
- Hoffman, D. L., & Fodor, M. (2010). Can you measure the ROI of your social media marketing? In *MIT Sloan management review*. sloanreview.mit.edu. <https://sloanreview.mit.edu/article/can-you-measure-the-roi-of-your-social-media-marketing/>
- Hongcharu, B. (2024). The changing roles of mass media amidst the growth of the digital media. *Cogent Social Sciences*. <https://doi.org/10.1080/23311886.2023.2297721>
- Hussain, A., Shabir, G., & Taimoor-Ul-Hassan, G. (2020). Cognitive needs and use of social media: a comparative study of gratifications sought and gratification obtained. *Information Discovery and Delivery*, 48(2). <https://doi.org/10.1108/IDD-11-2019-0081>
- Jenkins, H. (2020). *Convergence Culture*. New York University Press. <https://doi.org/10.18574/nyu/9780814743683.001.0001>
- Jimoh, A. L. (2025). Online service quality and civic engagement in Ilorin West, Nigeria: the mediating role of e-government communication experience. *Journal of Information, Communication and Ethics in Society*. <https://doi.org/10.1108/JICES-04-2025-0090/1298861>
- Juera, L. C. (2024). Digitalizing skills development using simulation-based mobile (SiM) learning application. In *Journal of Computers in Education*. Springer. <https://doi.org/10.1007/s40692-022-00246-8>
- Kavada, A. (2012). Engagement, bonding, and identity across multiple platforms: Avaaz on Facebook, YouTube, and MySpace. *MedieKultur: Journal of Media and Communication research*. <https://tidsskrift.dk/mediekultur/article/view/5486>
- Kharisma Zhuhriani, I., Cinthia Fitrianas, A., & Shafira, K. (2021). phenomenology study of using Instagram applications in personal creativity in photography at SMAN 2 Cirebon students. *COMMCAST*, 3(1), 8–12. <https://doi.org/10.12928/commicast.v3i1.5113>
- Loddo, O. G., Addis, A., & Lorini, G. (2022). Intersemiotic translation of contracts into digital environments. *Frontiers in Artificial Intelligence*, 5. <https://doi.org/10.3389/frai.2022.963692>
- Metzler, H., & Garcia, D. (2024). Social drivers and algorithmic mechanisms on digital media. *Perspectives on Psychological Science*. <https://doi.org/10.1177/17456916231185057>
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook*. 3rd. Thousand Oaks, CA: Sage.
- Monge, P. R., & Contractor, N. (2003). *Theories of Communication Networks*. Oxford University Press. <https://doi.org/10.1093/oso/9780195160369.001.0001>
- Mukherjee, P. P., Afroj, M., Hossain, S., & Biswas, M. (2022). Towards a digital twin integrated dlt and IoT-based automated healthcare ecosystem. *International Conference on Recent Trends in Image Processing and Pattern Recognition*. https://doi.org/10.1007/978-3-031-23599-3_23
- Nerissa, N., & Tutiasri, R. P. (2022). Interpersonal Communication Strategy Of Badminton Trainer In Increasing The Motivation Of Women's Dual Athletes Djarum. *JOSAR (Journal of Students Academic Research)*. <https://ejournal.unisablitar.ac.id/index.php/josar/article/view/2429>
- Odoom, R. (2025). Digital content marketing and consumer brand engagement on social media-do

- influencers' brand content moderate the relationship? *Journal of Marketing Communications*. <https://doi.org/10.1080/13527266.2023.2249013>
- Pour, M. J., & Karimi, Z. (2024). An integrated framework of digital content marketing implementation: an exploration of antecedents, processes, and consequences. *Kybernetes*. <https://doi.org/10.1108/k-02-2023-0178>
- Robertson, R. (1995). Glocalization: Time-Space and Homogeneity-Heterogeneity. In *Global Modernities* (pp. 25–44). SAGE Publications Ltd. <https://doi.org/10.4135/9781446250563.n2>
- Rogers, E. M., Singhal, A., & Quinlan, M. M. (2014). Diffusion of innovations. *An Integrated Approach to ...* <https://doi.org/10.4324/9780203887011-36>
- Saaty, T. L. (2013). Analytic hierarchy process. In *Encyclopedia of operations research and management* Springer. <https://www.academia.edu/download/51627807/saaty.pdf>
- Sadler-Smith, E. (2019). *Hubristic Leadership*. SAGE Publications Ltd. <https://doi.org/10.4135/9781529714838>
- Salonen, A., Mero, J., Munnukka, J., Zimmer, M., & Karjaluoto, H. (2024). Digital content marketing on social media along the B2B customer journey: The effect of timely content delivery on customer engagement. In *Industrial Marketing Management*. Elsevier. <https://www.sciencedirect.com/science/article/pii/S0019850124000221>
- Saygin, F., Aksoy, H., Alaboz, P., & Dengiz, O. (2023). Different approaches to estimating soil properties for digital soil map integrated with machine learning and remote sensing techniques in a sub-humid ecosystem. *Environmental Monitoring and Assessment*. <https://doi.org/10.1007/s10661-023-11681-0>
- Schultz, D., & Schultz, H. (2004). *The next generation: five steps for delivering value and measuring returns using marketing communication*. Boston, Massachusetts: Mc Graw Hill.
- Shannon, C., & Weaver, W. (2021). The Mathematical Theory of Communication (Urbana: University of Illinois, 1949). In *The Shannon-Weaver theory is a quantitative model*.
- Sharma, V., Kumar, A., & Sharma, K. (2025). Digital twin: securing IoT networks using integrated ECC with blockchain for healthcare ecosystem. *Knowledge and Information Systems*. <https://doi.org/10.1007/s10115-024-02273-6>
- Shu, K., Sliva, A., Wang, S., Tang, J., & Liu, H. (2017). Fake news detection on social media: A data mining perspective. *ACM SIGKDD Explorations Newsletter*. <https://doi.org/10.1145/3137597.3137600>
- Steinhoff, L., Arli, D., Weaven, S., & Kozlenkova, I. V. (2019). Online relationship marketing. *Journal of the Academy of Marketing Science*. <https://doi.org/10.1007/s11747-018-0621-6>
- Sundar, S. S., & Limperos, A. M. (2013). Uses and Grats 2.0: New Gratifications for New Media. *Journal of Broadcasting & Electronic Media*, 57(4), 504–525. <https://doi.org/10.1080/08838151.2013.845827>
- Terho, H., Mero, J., Siutla, L., & Jaakkola, E. (2022). Digital content marketing in business markets: Activities, consequences, and contingencies along the customer journey. In *Industrial Marketing Management*. Elsevier. <https://www.sciencedirect.com/science/article/pii/S0019850122001444>
- Toyama, K. (2011). Technology as amplifier in international development. *Proceedings of the 2011 IConference*, 75–82. <https://doi.org/10.1145/1940761.1940772>
- Tutiasri, R. P., Rahmawati, D. H., Tanoyo, P., & Setiawan, J. D. (2022). Utilization of Agricultural

Extension Communication Media: Utilization as a Communication for Millennial Farmer Development in the Special Region of Yogyakarta (DIY). *International Journal of Research and Innovation in Social Science (IJRISS)*. https://econpapers.repec.org/article/bcpjournl/v_3a6_3ay_3a2022_3ai_3a8_3ap_3a424-428.htm

Wang, Y., Zhou, Z., Gong, S., Jia, D., & Lei, J. (2021). The Effects of Emotional Design on Multimedia Learning and Appreciation of Chinese Poetry. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.621969>

Warschauer, M. (2004). *Technology and social inclusion: Rethinking the digital divide*. books.google.com.

https://books.google.com/books?hl=en&lr=&id=nU4zz1088mAC&oi=fnd&pg=PR9&dq=technology+and+social+inclusion+rethinking+the+digital+divide&ots=rXYs0Sl42t&sig=XICJcu64nGs_XG4RVj_TsdPNHv4

Wulandari, A., Mulyana, D., Hadisiwi, P., & Rizal, E. (2025). Digital Learning Communication to Preserving Javanese: The Role of Digital Media in Education of Local Language in High Schools, Yogyakarta, Indonesia. *Educational Process: International Journal*. <https://eric.ed.gov/?id=EJ1483471>

Xie, Q., & Lou, C. (2024). I feel like owning it! Exploring the antecedents of psychological ownership and its impact on brand loyalty in digital content marketing. *Journal of Interactive Advertising*. <https://doi.org/10.1080/15252019.2023.2295258>

Xiong, F., & MacKenzie, K. (2015). The business use of Twitter by Australian listed companies. *The Journal of Developing Areas*, 49(6). <https://doi.org/10.1353/jda.2015.0107>