



CONTENT: JOURNAL OF COMMUNICATION STUDIES

Journal homepage: <https://talenta.usu.ac.id/cjcs>



Communication Strategy of the Public Broadcasting Institution (LPP RRI) Lhokseumawe in Implementing the RRI Digital Application

Faridah Hannum^{*1} , Bobby Rahman¹ , Cut Andyna¹ 

¹Universitas Malikussaleh, Lhokseumawe, 24355, Indonesia

*Corresponding Author: faridah.210240033@mhhs.unimal.ac.id

ARTICLE INFO

Article history:

Received 10 July 2025

Revised 25 November 2025

Accepted 26 November 2025

Available online 30 November 2025

E-ISSN: 3032-4440

How to cite:

Hannum, F., Rahman, B., & Andyna, C. (2025). Communication Strategy of the Public Broadcasting Institution (LPP RRI) Lhokseumawe in Implementing the RRI Digital Application. *CONTENT: Journal of Communication Studies*, 3(2), 27-34. <https://doi.org/10.32734/cjcs.v3i02.21889>

ABSTRACT

Public Broadcasting Institution (LPP RRI) Lhokseumawe in implementing the RRI Digital application as part of its adaptation to technological developments in the digital era. Using a descriptive qualitative approach, data were collected through in-depth interviews, observation, and documentation involving RRI management, staff, and active listeners. The findings reveal that internal strategies encompass employee training and application familiarization, whereas external strategies include cross-platform promotion, collaboration with local media, and optimization of social media channels. However, several challenges remain, including uneven digital literacy, infrastructure limitations, and the need for human resources to adapt to new technologies. The study recommends strengthening digital literacy initiatives, enhancing promotional strategies, and improving localized engagement efforts to increase public access and optimize the use of the RRI Digital application.

Keyword: Communication Strategy, RRI Lhokseumawe, RRI Digital Application, Media Convergence, Digital Transformation

ABSTRAK

Penelitian ini bertujuan untuk menganalisis strategi komunikasi yang digunakan oleh Lembaga Penyiaran Publik (LPP) RRI Lhokseumawe dalam mengimplementasikan aplikasi RRI Digital sebagai bentuk adaptasi terhadap perkembangan teknologi informasi di era digital. Transformasi media dari analog ke digital menuntut lembaga penyiaran publik untuk menghadirkan konten yang informatif, edukatif, dan mudah diakses melalui berbagai platform digital. Penelitian ini menggunakan pendekatan kualitatif deskriptif dengan teknik wawancara mendalam, observasi, dan dokumentasi. Informan terdiri atas pimpinan, staf, dan pendengar aktif RRI Lhokseumawe. Analisis dilakukan berdasarkan teori konvergensi media Henry Jenkins serta teori strategi komunikasi Wayne Pace dan Dallas Burnet. Hasil penelitian menunjukkan bahwa strategi komunikasi yang diterapkan meliputi penguatan pemahaman internal karyawan, promosi lintas platform, kolaborasi media lokal, serta optimalisasi media sosial. Tantangan yang dihadapi meliputi rendahnya literasi digital masyarakat, keterbatasan infrastruktur, dan adaptasi SDM terhadap teknologi baru. Penelitian ini merekomendasikan peningkatan inovasi digital, edukasi literasi teknologi kepada masyarakat, serta penguatan promosi lokal agar aplikasi RRI Digital dapat menjangkau masyarakat secara lebih luas dan merata.

Kata Kunci: Strategi Komunikasi, RRI Lhokseumawe, Aplikasi RRI Digital, Konvergensi Media, Transformasi Digital



This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International. <http://doi.org/10.32734/register.v6i1.idarticle>

1. Introduction

The development of information and communication technology has made a positive contribution to changes in public perceptions and activities, as well as public services, which are increasingly oriented toward ease of conducting various activities using more modern and up-to-date (reliable) sources of information. One medium that provides current information is the radio. Today, radio continues to be trusted as a balanced communication and information medium in society, serving functions as a source of information, education, and entertainment.

One of the advantages of radio as a mass medium lies in its broad dissemination of information; the content broadcast has freshness and flexibility. Due to its variety of programming, radio provides an auditory experience to its listeners. In addition, radio's strengths include its auditory and relaxing nature, making it easier to convey messages in attractive formats that can be listened to while eating, lying down, working, or relaxing in the car.

In terms of its development, the number of radio stations in Indonesia registered with Kominfo (the Ministry of Communication and Informatics) in 2019 reached 471,549 radio stations. Meanwhile, the number of radio stations registered in North Sumatra amounted to 128 stations (Simamora, 2021).

RRI Lhokseumawe, as a public broadcasting institution, has the mission of developing educational broadcasts to enlighten, educate, and empower society, as well as to encourage creativity within the framework of nation-building. RRI continues to innovate in serving its listeners. Currently, RRI no longer only broadcasts terrestrially, where audiences tune in at home via frequency waves. Now, by downloading the RRI Digital application from the Play Store, all RRI programs can be listened to anytime, anywhere. This application is also affiliated with the Radio Garden application, which enables users to access broadcasts from all over the world (Fauzi, 2014).

LPP RRI Lhokseumawe also produces digital broadcasts, podcasts, live streaming, mobile applications, and collaborations with local institutions to develop engaging and relevant content, as well as to improve the quality of RRI Lhokseumawe's broadcasts. An appropriate strategy in developing and implementing the RRI Digital application in RRI Lhokseumawe is crucial to ensure that this digital transformation enhances service quality, expands audience reach, and builds more interactive relationships with listeners in Aceh and surrounding areas.

Alongside technological advances, media consumption patterns among the public have also shifted. Today, many people prefer to access information through digital platforms, whether via social media, streaming apps, or online news portals. Audience satisfaction and accessibility are important factors that RRI must consider in implementing its digital strategy. Therefore, the RRI Digital application is not merely a tool for disseminating broadcasts but also a means of providing diverse, interactive, and personalized services (Hidayat, 2024).

However, the implementation of digital applications at RRI Lhokseumawe does not come without challenges. One of the main issues is the digital divide that still exists between urban and rural communities, as well as differences in digital literacy levels among listeners. This requires careful strategies to ensure that all members of society, whether in urban centres or remote areas, can easily access the RRI Digital application.

Additionally, RRI Lhokseumawe faces challenges in content management and monetization of the application, as well as in creating innovative features that attract younger audiences without neglecting their traditional listeners. Audience interactivity and engagement within the application are key to creating a rich user experience and strengthening RRI's position as a trusted medium for delivering information.

Given these circumstances, it is important to analyze the strategies implemented by LPP RRI Lhokseumawe in deploying the RRI Digital application. This includes various aspects, from technological planning and content development to promotion and digital literacy education for the audience. By formulating the right strategy, RRI Lhokseumawe is expected to maximize the benefits of the RRI Digital application to address the challenges of the times while expanding public service coverage to all communities (Hidayat, 2024).

Therefore, the researcher is interested in studying the communication strategies of LPP RRI in implementing the "RRI Digital" application at RRI Lhokseumawe, as this can be seen from several

issues faced by RRI Lhokseumawe, namely disparities in technological access among the public, competition with other social media and digital platforms, and challenges in developing digital content.

1. Method

Data collection technique is the most essential step in research, as the main goal of research is to obtain data (Effendy, 2020). This study discusses the communication strategy of LPP RRI in implementing the RRI Digital application on RRI Lhokseumawe Radio. The researcher obtained data using several data collection techniques, including:

1. Observation

Observation, as a data collection technique, has specific characteristics compared to other techniques such as interviews and questionnaires (Shopie, 2023). Through observation, the researcher can understand behaviors and the intentions behind them. The observation in this study was conducted through direct field observations to understand how LPP RRI's communication strategy attracts listeners in Lhokseumawe City.

2. Interview

In this study, the researcher used a semi-structured interview technique. This method allows more flexibility in obtaining data. The interviews were conducted with pre-determined informants. The answers received were then recorded and reprocessed in the researcher's own words and described in written form. These interviews were conducted directly and openly, allowing informants the freedom to respond more broadly and deeply, thereby enabling in-depth data collection and producing more accurate results (Shopie, 2023).

3. Literature Study

The literature study was conducted by collecting data related to the study of interpersonal communication patterns. This was done by reading books, articles, and journals. The researcher obtained various sources of data from platforms such as eBooks. Gramedia, e-journal.id, Publish or Perish 8, Google Scholar, institutional repositories, and Z-Library.

4. Documentation

Documentation is one of the secondary data sources needed in research. The documentation study can be defined as a data collection technique using written materials published by the subject of the study. The researcher used this technique because relevant documents and data could be more easily obtained from the research site, and the information gathered from interviews could be validated through documented evidence (Yusra, 2021)

Data Analysis Techniques

This stage is used to analyze and organize the data obtained from sources in the field. Data analysis is the process of systematically searching for and organizing data obtained from interviews, field notes, and other materials so that it can be understood. The researcher concluded that data reduction is the process of selecting and focusing on simplifying and transforming raw data that appears in written records. This process continues throughout the course of the research (Shopie, 2023). The data analysis technique used in this study follows the model by Sugiyono, as cited in Shopie (2023), which includes:

1. Data Reduction

Data reduction involves summarizing, selecting essential elements, focusing on important information, and identifying patterns and themes to provide a clear overview and help the researcher collect further data efficiently.

2. Data Display

In qualitative research, data display can be presented in the form of brief descriptions, diagrams, relationships between categories, and the like. By displaying data, it becomes easier to understand what is happening, which in turn helps plan the next steps based on that understanding.

3. Conclusion Drawing

Conclusions in qualitative research are intended to answer the research questions. As stated earlier, the research problems and questions in qualitative studies are often provisional and may evolve during field research. Once data is obtained, the researcher can draw conclusions to provide direction and achieve meaningful results.

3. Result and Discussion

3.1 Strategy of the Public Broadcasting Institution (LPP) RRI in Implementing the RRI Digital Application

Based on the research conducted by the author at RRI Lhokseumawe, the strategy implemented in adopting the RRI Digital application aims to retain its audience by encouraging them to use the application. The communication strategy applied by LPP RRI represents a digitalization initiative introduced by the central RRI and implemented across all work units, including RRI Lhokseumawe, to improve technology-based public information services.

A strategy in the broadcasting industry is essential as part of production planning, and radio also requires a program concept that serves as a foundation for classifying broadcast activities. Management must understand what the audience needs because the programs to be aired are formatted according to listeners' needs and are oriented toward making radio programs comprehensible, acceptable, and enjoyable for the public.

The success of a strategy is reflected in several indicators, such as listener loyalty, advertising revenue, and content programming. Based on interviews conducted by the researcher, the communication strategy of the Public Broadcasting Institution (LPP) RRI Lhokseumawe in implementing the RRI Digital application is to ensure that all employees understand, accept, and are capable of operating the RRI Digital application. The strategy they used, according to Wayne Pace and Dallas Burnet, includes:

a. To secure understanding (ensuring the message is received by the communicant).

To secure understanding in the context of RRI means the efforts and strategies carried out by the division head to ensure that messages or information regarding the introduction of the RRI Digital application are genuinely understood by employees at RRI Lhokseumawe. This is achieved by leveraging Henry Jenkins' theory of media convergence, which emphasizes the importance of integrating various communication platforms such as radio broadcasts, social media, WhatsApp groups, and internal webinars to expand reach, facilitate information access, and create spaces for two-way interaction, thereby optimizing employees' understanding of the use of the RRI Digital application.

b. To establish acceptance (building acceptance of the message)

"To establish acceptance means ensuring that the audience not only receives information but also understands, trusts, and is willing to adopt it. As demonstrated through live broadcasts and interviews at RRI, in this context, Henry Jenkins' media convergence theory is highly relevant, as it enables RRI to integrate radio broadcasts, social media, podcasts, and digital applications in a unified manner. In this way, communication strategies can be delivered persuasively, credibly, and relevantly across various platforms, bringing the message closer to the audience and fostering positive and voluntary acceptance."

c. To motivate action

"To motivate action in the context of communication means encouraging the audience to take action in line with the purpose of the message, not merely to understand or accept the information. This was conveyed directly through interviews with computer system officers who support and assist in the implementation of the RRI Digital application. In this regard, Henry Jenkins' media convergence theory is relevant because it enables RRI to integrate radio broadcasts, online news portals, social media, and digital applications as complementary, unified channels. In this way, messages are not only disseminated but also designed to influence employees' behavior so that they are willing to use, support, and actively optimize the application of RRI Digital in practice."

3.2 The Communication Strategy Process Carried Out by Employees in Implementing the RRI Digital Application through the Theory of Wayne Pace and Dallas Burnet

Based on the data the researcher found in the field, it can be concluded that the communication strategy carried out consisted of implementing the RRI Digital application as part of LPP RRI's digital transformation to remain relevant in the era of information technology. In this process, success is determined not only by the

sophistication of the application itself but also by the communication strategies carried out by employees to deliver information, build understanding, and encourage adoption among internal and external audiences.

This discussion outlines the stages of communication strategies carried out by RRI Lhokseumawe employees, starting from planning to evaluation. In the initial stage, systematic communication planning was conducted. Employees from the Public Relations division, computer operators, and the Broadcasting division held discussions about what messages to convey, identified target audiences, selected communication media, and developed a socialization schedule. The message was focused on the benefits of using the RRI Digital application, the ease of accessing information and broadcasts, and the modernization of RRI's public services. As an important part of organizational communication, RRI employees were first provided with an understanding of the application through daily briefings and weekly meetings. This step aimed to ensure that all employees understood the features of the application so they could explain and educate the public effectively. This strategy also built internal alignment so that all employees fully supported RRI's digital transformation.

Once the internal process was complete, employees actively participated in socializing the RRI Digital application to the public through several communication channels they managed, such as radio broadcasts, social media, live events, and collaborations with other institutions. The communication strategy did not stop at delivering information. Employees also played a role in listening to user feedback, recording technical issues or public questions, and reporting them to central management for application development.

Public feedback became important material for evaluating the communication strategy and improving service quality. The communication strategy implemented by employees in deploying the RRI Digital application encompassed effective planning, internal socialization, public campaigns, and evaluation of public responses. Employees acted as active communicators, bridging the institution and the public in the process of adopting digital technology. This active and collaborative involvement has been a key factor in the successful implementation of the RRI Digital application at RRI Lhokseumawe.

This research aligns with the theory used by the author, namely the theory of media convergence. In the media convergence theory, there are several components, such as ownership convergence, tactical convergence, structural convergence, coverage convergence, and presentation convergence, which serve as references in communication strategy. According to the media convergence theory, communication strategies require a series of stages to retain and attract new audiences and consistently provide the best service to the public.

a. **Ownership:**

Ownership at RRI (Radio Republik Indonesia) refers to the internal processes or policies of RRI in integrating its various media channels and platforms into a unified management and production system, not in the context of ownership by external entities, because RRI is a public broadcasting institution owned by the state, not a private company. Although the term "ownership convergence" usually refers to cross-media ownership by one corporation, in RRI's context, this term more appropriately describes media convergence: the merging of functions and production across RRI's media platforms—such as analog radio, digital radio, online streaming, and social media—into one integrated broadcasting ecosystem. This ensures that all activities of RRI Lhokseumawe, their workflows, and the media they use are connected with other RRI stations and comply with central directives.

b. **Tactics:**

Tactics involve unifying various operational and communication approaches to expand reach, improve message effectiveness, and strengthen the role of public service media. The tactics employed by RRI Lhokseumawe combine conventional broadcasting with digital broadcasting via AM/FM radio, which is also streamed online (RRI Digital), as well as recording all broadcasts and conducting live coverage in local areas.

As a public broadcasting institution, RRI not only airs entertainment but also provides the latest information and news in the Lhokseumawe area. They leverage RRI's digital newsroom network to merge local and national news. RRI Lhokseumawe also collaborates with local agencies (such as regional governments, disaster management offices, and the police) to gather information from the community, such as disasters, traffic, and elections.

Their services are delivered not only via radio but also through WhatsApp blasts, social media, YouTube, and interactive programs such as "Public Dialogue," which allows direct participation by the community. The impact of this approach is highly positive, as it expands the audience across various age groups and media channels, improves the effectiveness of public information dissemination, and strengthens RRI Lhokseumawe's position as an adaptive and modern local media outlet.

c. **Structure:**

Structural convergence at RRI Lhokseumawe refers to the unification or adjustment of the organizational and work structures to become more efficient, integrated, and relevant to technological developments and public demands in the digital era.

This involves merging previously separate work functions—such as news production, broadcasting, and digital media—into one collaborative workflow among RRI Lhokseumawe employees. Internal organizational structure adjustments must support multi-platform broadcasting (radio, digital, and social media) as well as the creation of new units to support the digital era, such as multiplatform content teams, digital engagement teams, and streaming teams.

Examples of RRI Lhokseumawe's implementation:

1. **Integrated Newsroom:** Reporters, editors, and announcers work in one unified workflow to produce content for both radio and digital platforms.
2. **Role Flexibility:** Announcers can also act as content creators for social media, and reporters not only write text news but also create short videos or audio clips for digital platforms.
3. **Cross-Division Collaboration:** Broadcast programs involve technical teams, news teams, and digital teams simultaneously; live events like talk shows are aired on the radio and streamed on YouTube at the same time.

d. **Coverage:**

Coverage convergence at RRI Lhokseumawe refers to integrating platforms, resources, and work methods in the news gathering process so that the coverage output can be distributed simultaneously to various media—radio, website, social media, and digital applications.

At RRI Lhokseumawe, events are covered only once, then processed into multiple distribution formats. Reporters record audio for radio broadcasts, write text news for RRI.co.id, take photos and short videos for Instagram and YouTube, and share them via editorial WhatsApp groups and social media. The reporter teams work in one newsroom to facilitate the use of digital coverage applications (RRI Digital), broadcasting news on radio and uploading it to the website while promoting it on social media almost simultaneously.

e. **Presentation:**

Presentation convergence at RRI Lhokseumawe refers to the unified and adaptive presentation of information or programs across platforms and audience segments, integrated in a manner that is responsive to technological developments and public needs. The presentation convergence implemented by RRI Lhokseumawe involves designing content in formats and styles that can be accepted on multiple media channels simultaneously, not only through radio broadcasts.

The objectives of the presentation convergence implemented by RRI Lhokseumawe are:

- To reach various audience segments, from traditional radio listeners to social media users.
- To increase engagement and public understanding of broadcast content.
- To make RRI Lhokseumawe more relevant and competitive amid the dominance of digital media.

4. Conclusion

Based on the research findings and discussions presented by the researcher, it can be concluded that the communication strategy of the public broadcasting institution (LPP) RRI Lhokseumawe in implementing the RRI Digital application is as follows: The communication strategy in implementing the RRI Digital application was carried out systematically and in a structured manner, referring to the communication theory of Wayne Pace and Dallas Burnet. This strategy involved internal employee understanding of the application, fostering audience acceptance of the message, motivating action to use the application, and ultimately achieving the institution's overall communication objectives. This strategy is also in line with the theory of media convergence, whereby RRI Lhokseumawe integrates various broadcasting platforms (conventional radio, digital radio, social media, streaming, and mobile applications) into a collaborative and efficient work system. Socialization activities were conducted actively through both internal and external media, employee training, and collaboration with external parties such as local governments and community organizations. Public response to the RRI Digital

application has generally been positive, especially among younger audiences. However, technical challenges such as varying levels of digital literacy among employees and internet connectivity issues still occur. Despite these challenges, RRI Lhokseumawe continues to carry out evaluations and improvements to ensure that this application remains relevant and beneficial for its audience.

References

- Agustina, S. (2023). *Bauran pemasaran Dinas Kepemudaan Olahraga dan Pariwisata Kota Subulussalam dalam mempromosikan Tahura Lae Kombih*. (Skripsi, Universitas Malikussaleh).
- Alimi, F., & Arundinasari, I. (2024). Penerapan Paradigma Whole of Government dalam Pelayanan Pusat Pembelajaran Keluarga pada Kelurahan Pakis, Kecamatan Sawahan, Kota Surabaya. *VISA: Journal of Vision and Ideas*, 4(2), 587–600.
- Amalia, A. Z. (2019). *Strategi Radio RRI Pro 2 88.4 FM Pekanbaru dalam menarik minat pendengar* (Doctoral dissertation, Universitas Islam Negeri Sultan Syarif Kasim Riau).
- Effendy, O. U. (2020). *Ilmu komunikasi: Teori dan praktik*. PT Remaja Rosdakarya.
- Fauzi, A. (2014). Radio sebagai media komunikasi massa di era digital. *Jurnal Ilmu Komunikasi*, 3(2), 45–56.
- Fitri, D., Anismar, A., Fazil, M., & Ula, C. W. (2021). Smartphone sebagai Gaya Hidup Mahasiswa (Studi pada Mahasiswa FISIP 2018). *Jurnal Jurnalisme*, 10(1), 32–41.
- Hapsari, D. T. (2019). Jurnalisme Radio di Era Digital: Transformasi dan Tantangan. *Masyarakat Indonesia*, 44(1), 61–74.
- Hidayat, Z., Hasmawati, F., & Hamandia, M. R. (2024). Komunikasi Massa pada Media RRI Palembang dalam Eksistensi Media Online (RRI.co.id). *Jurnal Bisnis dan Komunikasi Digital*, 1(3), 10–10.
- Jenkins, H. (2006). *Convergence Culture: Where Old and New Media Collide*. New York University Press.
- Kusuma, Y. (2021). Pentingnya Strategi Komunikasi dalam Berkomunikasi. *Jurnal Sudut Pandang*, 2(5), 1–5.
- Mayfield, J., & Mayfield, M. (2022). Business Communication Lessons in Agility: Introduction to the Special Issue on the COVID-19 Pandemic. *Journal of Business Communication*, 59(2), 163–173.
- Misbach, W. M., & Fitri, A. (2024). Strategi Komunikasi Radio Republik Indonesia (RRI) Jakarta dalam Mempertahankan para Pendengar (Analisis pada Program Siaran Mimbar Agama Islam). *Jurnal Cakrawala Ilmiah*, 4(1), 4067–4080.
- Paradilla, C. (2024). *Strategi Humas dalam Mengimplementasikan Aplikasi “RRI Play Go” pada Radio RRI Kota Pekanbaru* (Doctoral dissertation, Universitas Islam Negeri Sultan Syarif Kasim Riau).
- Saputra, A., & Mahendra, A. I. (2024). Implementation of Radio Convergence of the Republic of Indonesia (RRI Pro 1 Yogyakarta) in Maintaining Existence in the Digital Era. *Journal of Humanities and Social Sciences Innovation*, 4(2), 193–199.
- Sanmas, M., Nurjayanti, N., & Yusron, M. (2024). Strategi Siaran LPP RRI Jayapura dalam Meningkatkan Minat Pendengar Masyarakat Kota Jayapura. *Jurnal Ilmiah Tata Sejuta STIA Mataram*, 10(1), 80–95.
- Simamora, N., & Saragih, F. V. J. (2021). Analisa Proses Produksi Program Siaran Berita di LPP RRI Medan dalam Meningkatkan Daya Tarik Pendengar. *Jurnal Teknologi Kesehatan dan Ilmu Sosial (Tekesnos)*, 3(2), 271–279.
- Sugiyono. (2017). *Metode Penelitian Kualitatif, Kuantitatif, dan R&D*. Alfabeta.
- Sulistya, Y. P., & Wahyuni, J. (2024). Pengaruh Motif Penggunaan Aplikasi RRI Digital terhadap Minat Dengar di Radio Republik Indonesia. *The Commmercium*, 8(2), 79–86.
- Setiawani, I., Hasan, N. A., & Rahmi, N. (2022). Implementasi Perpustakaan Berbasis Inklusi Sosial Dan Dampaknya Terhadap Perekonomian Usaha Mikro Kecil Menengah (Ukm): Penelitian

Di Desa Paya Tumpi Baru Aceh Tengah). *Proceedings ICIS 2021*, 306–315. <https://jurnal.ar-raniry.ac.id/index.php/icis/article/view/12681>

Wardhany, D. A., & Andika, M. R. (2024). Strategi komunikasi dalam mengatasi konflik internal di Perguruan Tinggi XYZ. *Jurnal Syntax Admiration*, 5(8), 3092–3098.

Waruwu, M. (2024). Pendekatan penelitian kualitatif: Konsep, prosedur, kelebihan dan peran di bidang pendidikan. *Afeksi: Jurnal Penelitian dan Evaluasi Pendidikan*, 5(2), 198–211.

Wijaya, I. S. (2015). Perencanaan dan strategi komunikasi dalam kegiatan pembangunan. *Lentera*, 17(1).

Yusra, Z., & Zulkarnain, R. (2021). Pengelolaan LKP pada masa pandemi Covid-19. *Journal of Lifelong Learning (JOLL)*, 4(1), 15-22. <https://doi.org/10.33369/joll.4.1.15-22>