

Analysis of Changes in Customer Communication Patterns Through the Use of the Myicon+ Application

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ABSTRACT

The increasing digitalisation of business has prompted companies to enhance the efficacy of their systems, even in the absence of physical meetings, with the aim of meeting customer needs and enhancing satisfaction. This encompasses telecommunications service systems. The MyICON+ initiative was conceived as a pioneering endeavour aimed at enhancing accessibility to information, streamlining account management processes, and facilitating enhanced customer engagement with the organisation. This study aims to identify and analyze changes in ICONNET customer communication patterns before and after MyICON+ application adoption, specifically examining the transformation from conventional communication channels (telephone, WhatsApp, email) to integrated digital platforms through the lens of New Media Theory's five dimensions: digitality, interactivity, hypertextuality, networking, and virtualization. The present research employs a constructivist and phenomenological paradigm, underpinned by new media theory and a qualitative research method, through in-depth interviews complemented by passive observation. The findings indicate a substantial shift in customer preference, with a notable transition from conventional services to faster and more integrated applications, exhibiting an average response time of 2–6 minutes. The integration of features such as live chat, real-time fault tracking, and billing notifications has been demonstrated to enhance efficiency and customer satisfaction. Nevertheless, obstacles remain, including technical bugs during initial use, some customers' preference for call centres, and the need for further socialisation. Overall, MyICON+ has created a digital communication ecosystem that is dynamic, interactive, and user-friendly, while strengthening customer loyalty.

KEYWORDS

Digital communication, new media, customer behaviour, customer communication



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INTRODUCTION

Globalization, digitalization, and the internet have become the three main pillars that make up the modern communication ecosystem (Horobets, 2020; Zekos, 2021). These three not only affect social and cultural interaction patterns but also open up opportunities for companies to accelerate the spread of technology without space and time limits (Fahira & Mustikasari, 2021). *Globalization* is understood as a situation when people are aware of their involvement in an ever-changing world, while *digitalization* brings a revolution in the way humans interact and manage information through technological developments and social media (Udoiwang & Akpan, 2023; Voronkova et al., 2023). The *Internet* itself plays a role as the backbone of global communication transformation that supports the birth of new interactive and real-time media (Bessarab et al., 2022; Huang et al., 2023).

This phenomenon is increasingly evident in Indonesia with a significant increase in internet penetration (Jamil, 2022). The We Are Social (2024) report notes that internet users in Indonesia have exceeded 213 million people, making Indonesia one of the largest digital markets in Southeast Asia. This condition creates opportunities as well as challenges for communication service providers to adapt to customer expectations that demand fast, easy, and integrated services (Panjaitan & Lupiana, 2023).

In this context, ICON+ as a subsidiary of PLN launched a fixed broadband service called ICONNET in July 2020, which managed to reach more than one million subscribers in less

than three years. To strengthen interactions with customers, ICON+ presents the *MyICON+* application, which provides account management features, nuisance reporting, and direct communication with customer service (Putra & Putra, 2024). The presence of this application shows the direction of digitization of telecommunication services that emphasizes flexibility and personalization of communication (Suradi et al., 2024; Vasilenko & Linkov, 2018).

Previous research by Putra (2024) entitled "*Communication Planning of ICONNET 150678 Contact Center in Handling Customer Complaints*" found that ICONNET employs structured communication approaches through standard operating procedures, agent training, and feedback systems in managing customer complaints. These findings demonstrate the importance of communication planning in building customer satisfaction within the telecommunications industry (Hajar et al., 2022; Hussain et al., 2019; Syallow et al., 2019). However, this study focused primarily on contact center operations rather than examining how digital applications transform customer communication behaviors themselves (Shrivastava, 2017).

Despite growing literature on digital transformation in telecommunications, several research gaps persist (Kraus et al., 2021). First, limited studies specifically examine customer communication pattern changes before and after mobile application adoption in Indonesian telecommunications contexts, with most research focusing on service quality or customer satisfaction metrics rather than behavioral communication transformations. Second, theoretical applications of New Media Theory to customer service digitalization remain underdeveloped, particularly in analyzing how digital media characteristics (digitality, interactivity, hypertextuality, networking, virtualization) manifest in customer-company interactions. Third, most existing research employs quantitative approaches measuring satisfaction or usage statistics, with insufficient qualitative exploration of subjective customer experiences and meanings attributed to communication channel transitions. Fourth, the balance between digital efficiency and human interaction needs in complex service scenarios requires deeper investigation to inform optimal service design strategies.

Based on this description, this study aims to identify and analyze differences in customer communication patterns before and after using the *MyICON+* application. This study uses the perspective of New Media Theory, which emphasizes how digital media changes the pattern of interaction between companies and customers through its digital, interactive, and network-based characteristics. Thus, this research is expected to make an academic and practical contribution for internet service provider companies in strengthening digital communication with customers.

METHOD

The research method used was a qualitative method with a phenomenological approach. This study aimed to understand changes in ICONNET customer communication behavior before and after using the *MyICON+* application through the subjective experiences of informants. The research locations included two main places: the interview with the customer was conducted at Endorse Kopi, East Jakarta, while the interview with the contact center agent was conducted at the PLN ICON Plus Mampang Office, South Jakarta. The research period lasted for a certain time, which included pre-observation, data collection, analysis, and report preparation. The data collection tools used included semi-structured in-depth interviews,

passive observations, and documentation studies. All of these methods and tools were selected to ensure the depth and validity of the data in accordance with the research focus on digital communication transformation in the context of customer service.

RESULT AND DISCUSSION

This study aims to analyze changes in ICONNET customer communication behavior after the use of the MyICON+ application. Data was collected through in-depth interviews with five customers and four service agents, as well as observations and documentation studies. The results of the study show that digital transformation through MyICON+ is considered to provide ease of access, time efficiency, and completeness of features, although the initial adaptation had caused confusion. Most users still view the call center as the main channel because it is considered faster and clearer. However, over time, MyICON+ is appreciated for being able to simplify the payment process, report outages, and provide an integrated transaction history that makes it easier for customers to resolve issues independently. This shows a shift in communication patterns from conventional services to more efficient and practical digital services.

Furthermore, the findings related to interactivity show that the user experience in the live chat feature is mainly determined by the speed of customer service response. Response times that take only 1–5 minutes on average are considered efficient and satisfying because they mimic real-time live interactions. Four out of five key speakers rated live chat as responsive, practical, even for non-urgent contexts. However, when faced with more complex problems, some users still prefer the phone line because it is considered to provide greater clarity and personal touch. Thus, the interactivity of digital services in MyICON+ is determined not only by the technical factor of speed, but also by the quality of the solution that is able to approach direct human interaction.

In terms of hypertextuality, navigation features, step-by-step guides, hyperlinks, and FAQs are very helpful for users in solving basic problems independently, allowing the search for solutions to run faster and reducing the burden on customer service. Nonetheless, a preference for direct interaction with CS still arises when issues are more complex or require detailed explanation. This confirms that the hypertextual function is more effective as an initial filter and a means of increasing user independence, but it has not completely replaced the role of human assistance.

Other findings on the network aspect show that MyICON+ is perceived not only as a technical infrastructure, but also as a transparent and integrated communication system. All the speakers admitted that they were satisfied with the quality of the network that was stable, smooth, and had minimal problems. In addition, the automatic notification features, payment history, and outage report status strengthen transparency and provide efficiency and independence in managing services. While interaction with CS is still considered important, the presence of these features strengthens user trust while providing a more practical service experience.

Meanwhile, virtualization is understood by users as the transition of living activities into a single centralized digital ecosystem through ICONNET. Most respondents started subscribing in the 2022–2023 period with the main reasons of stable network quality and affordable prices, especially after the COVID-19 pandemic confirmed the urgency of a reliable

internet connection. ICONNET was chosen because it can meet productive needs, such as work, business, and education, as well as consumptive needs such as entertainment, games, and streaming in one family service package. Thus, ICONNET is perceived as a solution because it combines technical reliability, affordability, and ease of service management through MyICON+. The following is a summary of the findings in accordance with the research sub-analysis.

Table 1. Summary of Findings Based on the Dimensions of New Media Theory

Dimension	Finding	Impact on Communication Behavior
Digitality	Customers were initially confused, but eventually became accustomed to the digital features.	A shift from dependence on CS (Customer Service) to independence in accessing services.
Interactivity	Live chat response is fast (1–5 minutes), but for complex issues, customers still prefer calling.	Communication becomes more efficient, but human interaction is still considered clearer and more personal.
Hypertextual	FAQ menus and guides are easily accessible, assisting in independent problem solving.	Reduced dependence on CS for simple issues; increased time efficiency.
Networked	Automatic notifications and information transparency increase trust.	Customers are more independent in monitoring service status and disruptions.
Virtualization	The internet becomes the backbone of digital activities for family and work.	A change in communication patterns from physical to digital; integration of services into one platform.

Transformation of Communication Patterns from Conventional to Digital

This research shows that digital transformation through the MyICON+ application has changed the communication behavior of ICONNET customers, from previously relying on conventional channels such as telephone, WhatsApp, and email, towards faster and more integrated digital platform utilization. This transformation is in line with Pierre Lévy's new media concept 1990, in Siregar, which emphasizes five main characteristics of digital media: digitalization, interactivity, hypertextuality, networking, and virtualization. This application is considered to provide ease of access, time efficiency, and completeness of features that are able to simplify various service processes, ranging from payments, interference reporting, to providing integrated transaction history. These findings are in line with Jusuf's research on "Digital Technology and Changes in Consumer Behavior: Case Study of the Millennial Generation" which emphasizes that digitalization in the shopping sector encourages consumers to fully switch to digital channels. The difference lies in the industry context: if in the retail sector consumers tend to quickly abandon conventional routes, then in telecommunication services such as ICONNET there is still a need for personal interaction, especially through call centers, because it is considered clearer, faster, and able to provide detailed explanations in technical and urgent cases.

In the early stages, some users did experience confusion in adapting to MyICON+, but as they were used, the majority appreciated the flexibility of the application that allowed for independent problem solving without always relying on customer service. The live chat feature, with an average response time of 1–5 minutes, suggests that digitization can mimic the real-time interaction experience, improving efficiency and customer satisfaction. However, a

preference for phone lines still emerges when faced with complex problems, as they provide clarity and personal nuances that cannot be completely replaced by technology. These findings are in line with Putri and Muslichah who emphasize that service quality affects customer loyalty, as well as consistent with Suherman & Putra who show that the integration of digital services increases satisfaction through speed and ease of access.

In addition to the interactivity aspect, MyICON+ hypertextuality also plays a significant role, where intuitive navigation, step-by-step guides, hyperlinks, and FAQs make it easier for users to solve basic problems independently while reducing the burden on customer service, emphasizing that digitalization is not only about accelerating responses, but also designing systems that are transparent, intuitive, and support user independence; Nonetheless, the preference for personal interaction remains strong when issues are complex, demonstrating the limitations of digitalization in replacing face-to-face communication entirely. From the network side, MyICON+ is not only perceived as a stable technical connection, but also as an integrated communication system, where the features of automatic notifications, transaction history, and monitoring of the status of outage reports form a transparent and reliable service ecosystem, strengthening customer trust and service management efficiency, in line with Pierre Levy's theory of digitality which emphasizes that digital media not only changes the way information is provided conveyed, but also how users interact and give meaning to the technology. Virtualization is a prominent dimension in this study, where the internet (ICONNET) has become the main digital infrastructure that underpins almost the entire realm of users' modern lives and transforms into an integrated multifunctional platform to meet productive needs.

Overall, MyICON+ has succeeded in transforming customer communication patterns by combining the efficiency, transparency, and flexibility of digital technology with the elements of human interaction that are still necessary for complex cases. Digitality, interactivity, hypertextuality, networking, and virtualization make up an ecosystem of services that allows customers to self-manage their needs, increase satisfaction, and strengthen loyalty. Thus, this study confirms that the success of digital transformation in telecommunication services does not only lie in the adoption of technology, but in the balance between digital convenience and the value of personal interaction, which provides a comprehensive and high-value service experience for customers.

The Role of New Media Characteristics in Improving Customer Experience

The five dimensions of new media—digitality, interactivity, hypertextual, networking, and virtualization—have been shown to have a positive impact on customer experience:

- a. **Digitality:** Although apps provide complete self-service, the preference for human interaction suggests that digitalization has not completely replaced the need for personal communication. This is in line with Levy's view that new media complements, but does not necessarily replace conventional interactions.
- b. **Interactivity:** The response speed of the live chat is considered satisfactory, but customers still choose the phone for complex issues. This shows that digital interactivity has limitations in handling the nuances of communication that require empathy and contextual clarity.

- c. Hypertextual: Structured navigation and FAQ features have successfully reduced CS workloads and increased customer self-reliance. These findings support the research of Mizanie & Irwansyah who stated that an intuitive interface can increase the adoption of technology.
- d. Network: Stable network quality and information transparency features build customer trust. This reinforces Fogarty's view that networks are not only physical, but also integrated information systems.
- e. Virtualization: ICONNET is not only an internet provider, but also a platform that supports the virtualization of daily activities. This reflects the deepening trend of digitalization in the post-pandemic era.

Theoretical and Practical Implications

These findings strengthen the theory of new media by showing how digital characteristics are applied in the context of customer service in Indonesia. From a practical point of view, the MyICON+ application has succeeded in creating a more efficient and responsive service ecosystem. However, improvements are still needed in terms of application stability, feature socialization, and agent training to maximize the potential of digital services.

Limitations and Suggestions for Further Research

This study has limitations in terms of the number of informants and geographical coverage. It is recommended for further research to conduct studies with a larger and more diverse coverage of research subjects, including customers from non-urban areas and more varied age groups. In addition, quantitative research can be conducted to measure the impact of an app on customer loyalty statistically.

CONCLUSION

Based on the results of the research that has been conducted, it can be concluded that the MyICON+ application has succeeded in transforming ICONNET's customer communication patterns from conventional methods (such as telephone, WhatsApp, email) to more integrated, efficient, and responsive digital services. This change in communication behavior is reflected in the increasing independence of customers in managing services, such as making payments, reporting outages, and monitoring service status independently through the features available in the application. The MyICON+ app not only speeds up response times (2–6 minutes on average) but also improves customer satisfaction through a user-friendly interface, intuitive navigation, and real-time notification features. Although there were some technical issues in the early stages of adoption and some customers still relied on conventional services, the app managed to create a better customer experience and drive loyalty. These findings are in line with Pierre Levy's New Media theory, which emphasizes the characteristics of digitality, interactivity, hypertextuality, networking, and virtualization as pillars of communication transformation in the digital era. Thus, MyICON+ is not only a technical tool, but also a tangible manifestation of technological integration in improving the quality of customer service. For further research, it is recommended to explore more deeply the socio-technological impact of the adoption of similar applications, as well as conduct comparative studies with

customer service platforms from other providers to enrich academic and practical perspectives in the field of digital communication.

REFERENCES

- Bessarab, A., Hyrina, T., Sytnyk, O., Kodatska, N., Yatchuk, O., & Ponomarenko, L. (2022). The modern transformation of internet communications. *Journal of Theoretical and Applied Information Technology*, 100(15), 4710–4722.
- Fahira, D. S. O., & Mustikasari, A. (2021). Promotion design through TikTok social media to increase brand awareness Sobat Indihome. *E-Proceeding of Applied Science*, 7(4), 650–665.
- Hajar, M. A., Alkahtani, A. A., Ibrahim, D. N., Al-Sharafi, M. A., Alkawsi, G., Iahad, N. A., Darun, M. R., & Tiong, S. K. (2022). The effect of value innovation in the superior performance and sustainable growth of telecommunications sector: Mediation effect of customer satisfaction and loyalty. *Sustainability*, 14(10), 6342.
- Horobets, O. (2020). Organization of big data in the structure of the digitalization ecosystem of a globalized society. *Scientific Bulletin of the National Academy of Statistics, Accounting and Audit*, 3, 93–103.
- Huang, L., Gao, B., & Gao, M. (2023). Smart media era: The third transformation in the age of internet communication. In *Value realization in the phygital reality market: Consumption and service under conflation of the physical, digital, and virtual worlds* (pp. 77–97). Springer.
- Hussain, S. A. I., Baruah, D., Dutta, B., Mandal, U. K., Mondal, S. P., & Nath, T. (2019). Evaluating the impact of service quality on the dynamics of customer satisfaction in the telecommunication industry of Jorhat, Assam. *Telecommunication Systems*, 71(1), 31–53.
- Jamil, H. (2022). Less inclusive growth in Indonesia? The unintended consequences of internet penetration. *Jurnal Ekonomi Bisnis dan Kewirausahaan*, 11(2), 197.
- Jusuf, D. I. (2023). Digital technology and changes in consumer behavior: Case study of the millennial generation. *Jurnal Ekonomi*, 12, 2023. <http://ejournal.seaninstitute.or.id/index.php/ekonomi>
- Kraus, S., Jones, P., Kailer, N., Weinmann, A., Chaparro-Banegas, N., & Roig-Tierno, N. (2021). Digital transformation: An overview of the current state of the art of research. *Sage Open*, 11(3), 21582440211047576.
- Panjaitan, W. J., & Lupiana, F. (2023). Penerapan transformasi digital dan hambatannya pada industri kuliner di Indonesia. *Jurnal Riset Manajemen dan Ekonomi (JRIME)*, 1(2), 278–301. <https://doi.org/10.54066/jrime-itb.v1i2.650>
- Putra, N. A., & Putra, A. (2024). Communication planning of ICONNET 150678 contact center in handling customer complaints. *Eduvest: Journal of Universal Studies*, 4(8), 6642–6656.
- Putri, L. A. A., & Muslichah, I. (2024). Evaluating customer quality, satisfaction, and loyalty in B2B relations: Insights from PT Telkom Witel Yogyakarta. *Journal of Economic, Business and Accounting (Costing)*, 7(5), 2651–2676. <https://doi.org/10.31539/costing.v7i5.12089>
- Shrivastava, S. (2017). Digital disruption is redefining the customer experience: The digital transformation approach of the communications service providers. *Telecom Business Review*, 10(1), 41.
- Suherman, N. A., & Putra, A. (2024). Communication planning of Iconnet 150678 contact center in handling customer complaints. *Eduvest: Journal of Universal Studies*, 4(8), 6642–6656. <https://doi.org/10.59188/eduvest.v4i8.1705>

- Suradi, A., Purwati, S., Zakaria, M., Nurbakti, R., & Mustafa, F. (2024). Analysis of determinant factors customer loyalty towards brand in the telecommunication industry with the digitalization paradigm. *Jurnal Sistim Informasi dan Teknologi*, 36–41.
- Syallow, A. M., Mberia, H., & Bosire, J. (2019). The role of organizational communication on employee job satisfaction in telecommunication industry in Kenya. *International Journal of Scientific and Research Publications*, 7(2), 412–417.
- Udoinwang, D., & Akpan, I. J. (2023). Digital transformation, social media revolution, and e-society advances in Africa: Are indigenous cultural identities in danger of extinction? *Social Media Revolution and E-Society Advances in Africa: Are Indigenous Cultural Identities in Danger of Extinction*.
- Vasilenko, N. V., & Linkov, A. J. (2018). Customization of the telecommunication market based on the application of the concept of service products. In *Telecommunication networks—Trends and developments*. IntechOpen.
- Voronkova, V., Vasyl'chuk, G., Nikitenko, V., Kaganov, Y., & Metelenko, N. (2023). Transformation of digital education in the era of the fourth industrial revolution and globalization.
- Zekos, G. I. (2021). E-globalization and digital economy. In *Economics and law of artificial intelligence: Finance, economic impacts, risk management and governance* (pp. 13–66). Springer.