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Telemedicine and Beyond: Halodoc's Digital Supply Chain Strategy for Better Medical Access and Quality in Indonesia

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ABSTRACT

The development of digital technology in the health sector is very important because it can overcome the limitations of access to medical services, especially in developing countries with limited infrastructure. This 0study aims to examine the implementation of digital supply chain strategies by HaloDoc in optimising healthcare services in Indonesia. It also aims to explore how digital technology integration improves operational efficiency and patient satisfaction in telemedicine services. The research method used was a literature study with a qualitative approach, reviewing various journals, industry reports, and official documents related to the digitalisation of the healthcare supply chain. The data was analysed using content analysis to classify the findings into themes such as service efficiency, drug stock management, and patient data security. The results showed that digitalisation of the supply chain at HaloDoc increased the speed of drug distribution, reduced patient waiting times, and expanded service coverage to remote areas. The integration of technologies such as Artificial Intelligence, cloud computing, and big data analytics also strengthens the efficiency of drug stock management and real-time prediction of patient needs. In conclusion, the implementation of a technology-based digital supply chain at HaloDoc has proven effective in improving operational efficiency and the quality of digital health services in Indonesia. The limitation of this research lies in the scope of the study which only uses secondary data, so it is recommended that future research use direct interview methods or case studies to get a more comprehensive perspective from internal companies and service users.

Keywords: Digital supply chain, Telemedicine, Service quality, Healthcare innovation, Artificial intelligence

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INTRODUCTION

The development of technology in Indonesia is increasingly rapid, especially in the era of the industrial revolution4.0, where technology is used to facilitate the fulfilment of people's needs. Digital transformation is also growing in the healthcare sector, encouraging collaboration between medical personnel, patients, and stakeholders. According to Kemenkes, (2023) and Dinkes (2023) technologies such as artificial intelligence (AI) have been used in organisation, surgery, cancer treatment, and health education.

Figure 1. HaloDoc Application (HaloDoc, 2025)

Based on Figure 1.1, HaloDoc is an Indonesian digital healthcare application founded by Jonathan Sudharta and Doddy Lukito in 2016 under PT Media Dokter Ivestama. The application has been collaborating with Gojek since 2018 through the GoMed feature, allowing users to purchase medicines directly from the application. HaloDoc also partners with thousands of certified doctors and collaborates with the Indonesian Medical Association (IDI) and the Indonesian Pharmaceutical Association (KKI) to ensure service quality. Its core services include emergency consultations, with 68% of cases resolved online. HaloDoc is the only Southeast Asian company listed in the Digital Health 150, recognised as a leading global provider of virtual healthcare services. This study examines HaloDoc as a digital healthcare platform offering online consultations, electronic prescriptions, and medication ordering. The focus is on HaloDoc's digital supply chain, encompassing system integration, inventory management, and medical services. This supply chain involves patients, doctors, partner pharmacies, logistics providers, and integrated technology systems, with an emphasis on data security and system interoperability.

Supply chain transformation in the healthcare sector is an effort to change the distribution system of goods and information through technology. Hospitals, clinics, and digital services such as HaloDoc are moving away from manual methods and turning to digital-based systems to speed up drug delivery, improve data accuracy, and ease coordination. Technologies such as IoT, AI, and cloud are being used to create more efficient and connected workflows. This digitization also makes the system more resilient to disruptions such as pandemics, as it is able to predict demand and speed up distribution (Razak et al., 2023). On the other hand, Harsono & Kiswara, (2022) emphasize that this transformation process still faces obstacles, especially in developing countries that have limited infrastructure and budget for technology investment. Overall, digital transformation in the medical supply chain has a positive impact on service efficiency and patient satisfaction, although it needs support from policies, HR training, and a strong data security system for the benefits to be fully felt.

Digital transformation is bringing about major changes in various sectors, including healthcare. The supply chain is defined as a network of companies involved in the process of producing value in the form of goods or services until they reach the end consumer (Yuswantoro et al., 2022). The HaloDoc case is interesting to discuss because it combines digital transformation, disruptive innovation, and business model innovation. Digital technology is replacing conventional methods, such as face-to-face consultations, which are now conducted virtually, reflecting the disruption occurring in the healthcare industry. Digital transformation in the supply chain also enables more efficient and integrated management of patient data, medication availability, and service distribution. Data security and interoperability remain the primary challenges in the digital healthcare supply chain. HaloDoc must ensure that patient medical data is secure and only accessible by authorised parties. System integration,

such as logistics, pharmacies, and hospitals, is important for the smooth flow of information. Without integration, the risk of stock errors, delivery delays, or data breaches increases. Unlike hospitals that have their own warehouses, HalloDoc relies on a network of partner pharmacies for drug distribution. Imbalances between demand and availability can disrupt services. Therefore, the use of predictive algorithms is necessary to manage stock and distribution efficiently, ensuring that drugs reach patients quickly and accurately.

Supply chain management is an approach that connects various parties in the business process, from suppliers to consumers. The goal is to ensure that products are available on time, in the right quantities, and in the right places, while reducing costs and improving service quality. Components such as suppliers, manufacturers, warehouses, and distributors must work in harmony to meet customer needs. To maintain operational efficiency and smoothness, the proper implementation of supply chain management is crucial, especially when facing the ever-changing dynamics of the market. A comprehensive and integrated business management strategy is needed for this sector to compete nationally. One relevant approach is the implementation of structured and efficient supply chain management (Lumbanraja et al., 2025). Service improvement is key to facing business competition. This process includes simplifying procedures, enhancing human resource competencies, leveraging technology, and adapting to customer needs. Fast, accurate, and easily accessible services must be designed from the outset. In a constantly changing market, service strategies must be able to meet consumer expectations while creating a competitive advantage. Service quality is determined by the extent to which a company understands and adapts to customer needs. A commitment to continuous improvement will help create satisfaction and maintain competitiveness (Gonu et al., 2023).

Based on the results of research by Listiani et al. (2024), which revealed that patient satisfaction with the healthcare services provided by the Halodoc application is still relatively low. This low level of satisfaction is due to several factors, such as doctors' responses that are perceived as not meeting patient expectations, consultation fees that are considered quite high by some members of the public, and a lack of customer understanding in using the various features available on the Halodoc application. The research findings of Erwin Permana et al. (2024) focus more on aspects of online consultations or general user satisfaction, without examining how the distribution of medicines, integration with pharmacy partners, logistics, and technology work together to create efficient and safe services. Research on digital supply chains in the healthcare industry remains very limited, especially regarding the practical application of such systems on platforms like Halodoc. Unlike conventional systems that are centred on hospitals, pharmacies, and distributors, digital supply chains are more complex and involve many parties such as patients, doctors, partner pharmacies, and logistics providers. This system can only run optimally if it is supported by integrated information technology, operational management, and business strategies. Most studies still focus on hospitals or the traditional pharmaceutical industry, so research on how digital supply chains operate within an internet-based healthcare ecosystem remains scarce. Therefore, this topic holds significant novelty and importance and warrants further investigation.

This study aims to enrich our understanding of how digital platforms such as HaloDoc drive progress in the healthcare supply chain, particularly from a business model perspective. Until now, many telemedicine services have remained stuck in a conventional approach that emphasises consultation without addressing important aspects such as stock management, e-prescriptions, cooperation with pharmacies, and logistics. This study opens up opportunities to design new business models that are more patient-centric with the support of technology. In addition to contributing to academic literature, this research also offers practical guidance for industry players and policymakers in designing more efficient, connected, and sustainable healthcare systems. The results are expected to address various important questions related to improving service quality, enhancing the efficiency of value creation processes, and fostering collaboration among partners within the HaloDoc digital ecosystem.

LITERATURE REVIEW

Innovation in Healthcare

Healthcare is a system of services that includes the process of diagnosis, prevention, treatment of disease, and restoration of health provided to individuals and community groups. In the modern context, healthcare relies not only on medical personnel and physical facilities, but also involves digital technology and artificial intelligence systems to support clinical decision-making and overall healthcare management. As it is directly related to human safety, health and well-being, this sector is categorised as a high-risk service that requires close scrutiny and ethical accountability principles in every aspect of its implementation (Bartsch et al., 2025). Innovation in healthcare can be defined as the combination of invention, adoption, and diffusion of ideas, products, services, or care pathways that provide tangible benefits compared to current practices. The success of an innovation is determined not only by its novelty value, but also by its ease of use and desirability within a complex healthcare system (Kelly & Young, 2017).

Innovation in the healthcare sector continues to experience significant developments, especially with the presence of digital technologies such as artificial intelligence (AI) that play a major role in the transformation of modern healthcare. The integration of AI in telehealth allows medical personnel to make real-time data-driven decisions, improve patient experience, and produce better health outcomes. The application of AI in telemedicine covers a wide range of areas, from patient monitoring, AI-assisted diagnosis, to complex clinical data analysis. In addition, AI also contributes to the development of chatbots, virtual assistants, and remote monitoring systems that are able to detect changes in patient conditions quickly and accurately, enabling early intervention and service efficiency (Amjad et al., 2023).

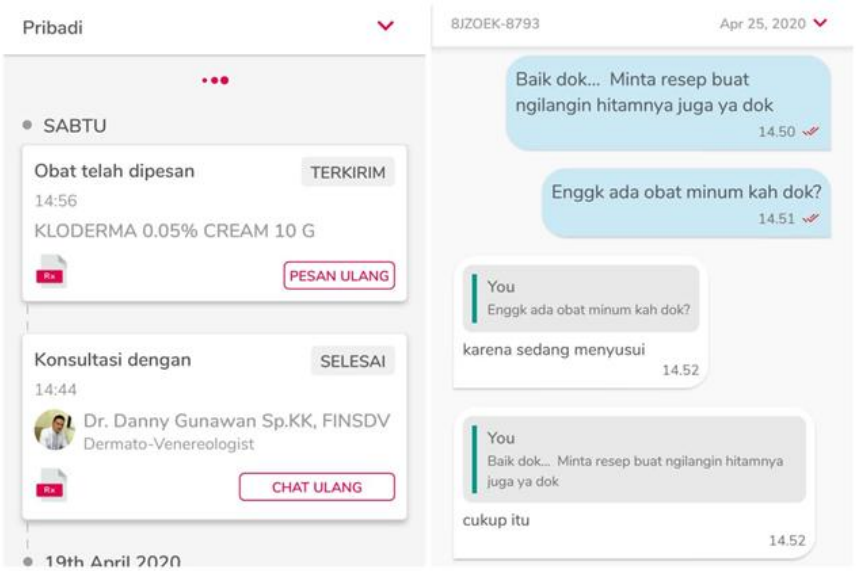

Figure 2. Consultation Experience at HaloDOC (Source: Juliana, 2025)

Innovation in healthcare relies heavily on a conducive organisational climate. Health workers are more likely to create and implement new ideas if they work in a safe, fair and supportive environment. Perceptions of job security play an important role in this, as a sense of security can encourage the courage to try new things. Thus, innovation in the healthcare sector is not just about new technologies or systems, but also about how organisations create a safe working environment and encourage employee engagement. When healthcare workers feel physically and psychologically protected, they are more likely to take initiative and contribute ideas for service improvement (Yalap & Da, 2025).

Digital Technologies in Healthcare

According to Ter-Akopov et al. (2019), digitalisation of healthcare includes not only the development of electronic medical records, telemedicine, big data, and artificial intelligence, but also the integration of wearable devices, augmented reality technology, and 3D printing in daily medical practice. In Russia, the implementation of digital healthcare has been pursued through various nationwide projects such as the Unified State Healthcare Information System (USHIS) and the Unified Medical Information and Analytical System of Moscow (UMIAS) that facilitate electronic medical record storage and remote consultation services.

Digital technology has played an important role in driving change in the healthcare system, especially in delivering faster, more affordable and equitable services. Varadarajan, (2024) asserts that various digital-based innovations such as telehealth, AI-based portable devices for diagnosis, and mobile health applications have been able to reduce barriers to medical services that have been caused by geographical factors and limited medical personnel. These technologies allow basic health services to be provided directly in the community through simple digital devices, while advanced consultations and specialist actions are still carried out at the main service centre with remote communication support. This model not only streamlines service costs, but also accelerates early disease detection and improves service quality in previously hard-to-reach areas.

This technology makes it easier for patients to monitor their own conditions, while also speeding up communication with medical personnel. However, the adoption of digital technology is not without its challenges. Issues such as privacy, data validity, and access limitations are major concerns. Many patients remain sceptical about the accuracy of digital technology if it is not supported by professional healthcare providers. Therefore, it is important that technology development is carried out with consideration for user needs and guided by principles of transparency and trust. With the right approach, digital technology can help create a healthcare system that is more responsive, personalised, and accessible to all segments of society (Locsin et al., 2021).

The use of technologies such as artificial intelligence, data analytics, and digital health applications has had a major impact on medical decision-making and patient care. One of the most noticeable changes is the increased use of digital systems to analyse health data. This technology allows doctors to understand patients' conditions in greater depth, including in terms of early diagnosis and disease risk prediction. In addition, many hospitals and clinics are beginning to use applications and wearable devices to monitor patients' conditions in real-time from a distance. Telemedicine is also an important part of this transformation. Patients can now consult with medical personnel without having to visit a healthcare facility in person. This not only expands access to services but also improves efficiency, especially in situations such as a pandemic. However, the use of digital technology in healthcare is not without its challenges. Issues such as data privacy protection, technological access gaps, and the lack of uniform standards and regulations still frequently arise. On the other hand, technology also opens up opportunities for healthcare systems to be more responsive and personalised in caring for patients (Borges do Nascimento et al., 2023).

Digital Supply Chain

Digital Supply Chain (DSC) is not just the application of technology to the supply chain process, but a change in the way organisations manage the flow of products, information and services in a smarter, more efficient and high value-added way. The study found that DSC is supported by various digital technologies such as big data analytics, cloud computing, Internet of Things (IoT), artificial intelligence, and autonomous vehicles that enable companies to make real-time decisions, improve supply chain visibility, and accelerate responses to market changes. In addition, DSC is considered to be able to bring

competitive advantage through optimising production processes, distribution, and increasing collaboration between parties in the supply chain network. (Büyüközkan & Göçer, 2018).

Digital supply chain not only relies on digital transformation, but also requires the integration of smart technologies to improve the relationship between supply chain actors. In a hub and spoke system, digital technology enables hubs and spokes to interact more quickly and efficiently through real-time data connections. This study shows that digital transformation without the support of smart technology is not optimal in improving collaboration performance. Therefore, strengthening technology at the spoke point is the key to creating an adaptive and competitive digital supply chain (Nasiri et al., 2020).

Digital supply chain is a supply chain management system that integrates various digital technologies, such as cloud computing, artificial intelligence, big data analysis, and the Internet of Things (IoT), to improve speed, accuracy, and operational resilience in the distribution process of goods and services. The application of these technologies aims to create a more efficient distribution channel that is adaptive to changing market needs and operational risks (Ghouri, 2025). The success of digital supply chain management is determined not only by the use of digital technology, but also by the company's strategy in managing digital assets. The strategy includes two main aspects, namely the breadth and depth of technology implementation. The wider and deeper companies utilise technologies such as big data, artificial intelligence (AI), Internet of Things (IoT) and blockchain, the higher the level of visibility and agility in their supply chains (Ye et al., 2022).

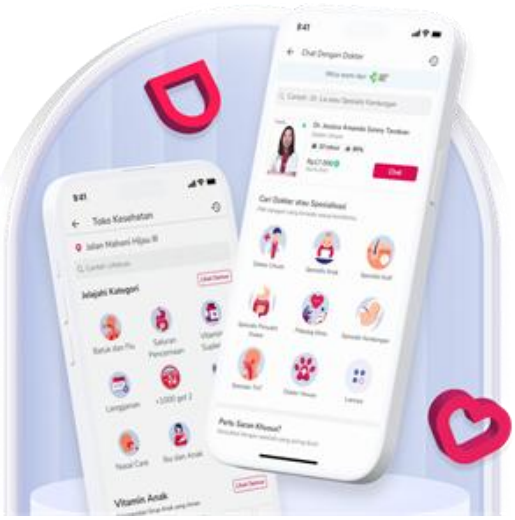

Figure 3. HaloDoc Application (Source: HaloDoc, 2025)

Supply chain management is an approach designed to regulate the flow of resources into final products, with the main objective of improving efficiency, productivity, and overall performance (Nur Anisa et al., 2025). HaloDoc, as a digital health platform, has successfully built an efficient supply chain ecosystem by connecting patients, doctors, pharmacies, and logistics in a single interconnected system. The implementation of this system allows patients to receive medication quickly after consultation, without the need to visit a healthcare facility in person (Erwin Permana et al., 2024).

RESEARCH METHOD

Research Subject

The subject of this study is the digital strategy implemented by HaloDoc as a technology-based healthcare platform in Indonesia. HaloDoc was founded in 2016 and has emerged as a pioneer in building a digital healthcare ecosystem in Indonesia.

Figure 4. Most Favourite Telemedicine Services for

Mental Health Consultations (Source: Databoks, 2023)

Figure 3.1 shows the list of telemedicine services most frequently chosen by Indonesians for health consultations. Halodoc tops the list with a usage rate of 79%, indicating that this platform is the most trusted and widely used by the public. Following it is Alodokter with 55%, then KlikDokter (28%), and several other services focused on mental health such as Riliv, Bicarakan.id, and Psikologimu. This information indicates that the public is increasingly accustomed to using digital health services, both for physical and psychological needs. The company's mission is to make it easier for the public to access practical, safe, and comfortable health services. Currently, Halodoc provides health services to the public in 38 provinces across Indonesia, including Aceh, North Sumatra, West Sumatra, Riau, Riau Islands, Jambi, South Sumatra, Bangka Belitung, Bengkulu, Lampung, Jakarta, Banten, West Java, Central Java, Yogyakarta, East Java, to regions in Kalimantan, Sulawesi, Bali, Nusa Tenggara, Maluku, and Papua.

Additionally, Halodoc is committed to maintaining the health of the Indonesian population by offering various preventive and curative services, all accessible through a single digital app. This strategy encompasses various digital initiatives used by HaloDoc to improve access to and quality of medical services, ranging from telemedicine services and drug distribution systems to the integration of technologies such as artificial intelligence (AI), the Internet of Things (IoT), and cloud computing. This research does not focus on specific individuals or user groups, but rather on the strategic approach applied by the company in the context of the digital supply chain. Therefore, the subject of the research focuses on how HaloDoc utilises digital technology to create a healthcare system that is more efficient, responsive, and accessible to the wider community.

Data Collection Techniques

The method used in writing this article is qualitative analysis using a literature study design. The literature study was conducted by reviewing various relevant written sources related to supply chain digitalisation in the healthcare system. The subject of this research is HaloDoc, focusing on how the platform integrates digital technology in its operations, including drug distribution, stock management, and integration of online medical consultation services. Through literature review and content analysis, this research explores the digital transformation strategy implemented by HaloDoc, the challenges faced, and its impact on service efficiency and user satisfaction. This approach enabled us to gain a deeper understanding of the role of technology in shaping an integrated and responsive healthcare ecosystem.

This research collected information from various secondary literature, such as scientific journals, reference books, official reports from HaloDoc, digital health service industry research, publications from related institutions, and previous studies on digital supply chains and the application of technology in the health sector. The purpose of this approach is to gain a conceptual and practical understanding of HaloDoc's supply chain digitalisation strategy in improving the effectiveness of medical service distribution and expanding public access to technology-based health services.

Data Analysis

The data used is secondary literature, the analysis technique applied in this research is content analysis. This method was conducted by classifying information from various literature sources into relevant thematic categories, such as digital supply chain, telemedicine strategy, benefits of supply chain digitalisation, and challenges and solutions in implementing digital supply chain in the healthcare sector. Each finding was systematically analysed, synthesised and compared with previous research to gain a comprehensive picture of HaloDoc's digital supply chain practices and strategies. The results of this analysis are then used to formulate conclusions and recommendations regarding the development of integrated supply chain-based digital health services.

HaloDoc is an Indonesian digital healthcare app founded by Jonathan Sudharta and Doddy Lukito in 2016 under PT Media Dokter Ivestama. The app has collaborated with Gojek since 2018 through the GoMed feature, enabling drug buyers to buy medicine directly from the app. HaloDoc also has thousands of certified doctors and works closely with IDI and KKI to ensure service quality. Its main services include emergency consultations, 68% of which can be completed online. HaloDoc is the only Southeast Asian company on the Digital Health 150 list, the world's leading virtual health service provider. This research examines HaloDoc as a digital healthcare platform that provides online consultations, e-prescriptions and medication ordering. It focuses on HaloDoc's digital supply chain, which includes the integration of information systems, stock management, and medical services. The supply chain involves patients, doctors, partner pharmacies, logistics providers and integrated technology systems, with an emphasis on data security and system interoperability.

RESULTS AND FINDINGS

Supply Chain Digitalisation

The supply chain digitalisation implemented by HaloDoc has had a positive impact on improving the efficiency of digital health services. Based on data from 2020 to 2022, active users of the app increased from 10 million to 20 million. Alongside this growth, patient waiting time decreased from 20 minutes to 14 minutes, while the success rate of drug delivery increased from 85% to 92% (HaloDoc, 2025). HaloDoc can predict healthcare needs, including drug demand, by utilising available historical data. This allows the company to respond more quickly and efficiently to patient needs even before they arise. collaborations with logistics partners such as Gojek, as well as the use of artificial intelligence and cloud services help HaloDoc to organise distribution flows more efficiently, The system is supported by artificial intelligence (AI) to predict drug needs, and cloud services to organise distribution automatically and in real-time. Users can receive medicine in a short time, even in hard-to-reach areas, thanks to this collaboration there are three types of delivery at HaloDoc:

Table 1. Delivery types in HaloDoc

Delivery Types	Waiting Time
Instant	Received within 60 minutes after the driver picks up the order.
Instant Saving	Received within 3 hours after the driver picks up the order.
Regular	Received within 1 to 4 days

Based on Table 1, patients can receive medical services and medicines in a faster and more timely manner. Not only that, the digital system also supports real-time data processing, allowing HaloDoc to adjust its service capacity according to user needs. As a result, HaloDoc has been able to maintain service quality amidst increasing demand. This digital strategy demonstrates that technology-based supply chain integration can drive health services to be more responsive, accessible and reliable for the wider community.

Benefits of Supply Chain Digitalisation

Supply chain digitalisation provides significant benefits to the effectiveness of HaloDoc's healthcare operations. One of the main benefits is the efficiency of managing the flow of drug distribution and medical services through an integrated system. By utilising cloud-based technology, drug stock data and patient demand can be monitored in real-time without having to rely on manual systems. This allows for a faster and more accurate decision-making process. In addition, an artificial intelligence-based prediction system allows HaloDoc to anticipate patient needs even before they arise, resulting in more responsive service.

Another benefit is the increased speed of drug distribution through collaboration with logistics partners such as Gojek. This collaboration allows deliveries to be made within minutes, especially for Instant service types. This speed certainly has a positive impact on patients who need medicine immediately, while creating trust in digital healthcare platforms. Not only that, the digital system also helps reach areas that were previously difficult to serve by conventional health services. With a data-driven approach and automated systems, HaloDoc is able to adjust service availability according to the geographical distribution of user needs.

In addition to efficiency and speed, supply chain digitisation also encourages an overall improvement in service quality. Well-managed data allows coordination between partners such as pharmacies, doctors, and logistics providers to run more smoothly. The process of monitoring drug stocks, arranging delivery routes, and confirming receipt can be done in one interconnected system. With a more integrated system, the potential for delays, delivery errors, or stock vacancies can be significantly minimised. This not only improves the company's internal performance, but also strengthens patient satisfaction as service users. Supply chain digitisation proves to be an important foundation in creating adaptive, fast, and reliable digital healthcare services.

HaloDoc Service Quality

The findings in this study show that HaloDoc's service quality still faces a number of challenges, particularly related to equitable access to digital health services in various parts of Indonesia. The inequality of internet networks in spoke areas is a major obstacle that has a direct impact on delays in service, drug distribution, and the quality of online medical consultations received by patients in remote areas. In addition, telemedicine services that do not allow direct physical contact between doctors and patients are also still an important issue, as some patients doubt the accuracy of diagnoses based solely on online consultations.

Not only that, the community's low understanding of technology is also an obstacle. Many users in certain areas are not accustomed to utilising the application's features independently, thus reducing the effectiveness of the services provided. Another challenge faced by HaloDoc is the imbalance between the demand for services and the availability of medicine stock, as HaloDoc's distribution system still relies on partner pharmacies without having its own central warehouse. On the other hand, the risk of patient data security and the lack of system integration between HaloDoc and its logistics and pharmacy partners are also serious concerns in managing the operations of this digital health service. Despite these obstacles, HaloDoc has taken steps to improve its operations by implementing a digital supply chain based

on AI, big data and cloud computing technologies at the hub and spoke points. This system makes it easier to track drug stocks, monitor patient needs, and speed up distribution to various regions. In addition, HaloDoc developed an application that can still be accessed with a weak internet connection, so that people in areas with limited signal can still use the service. To expand its drug distribution reach and speed up delivery, HaloDoc is expanding cooperation with logistics partners such as Gojek and local network providers. In the area of data security, the company applies encryption technology and a double authentication system to protect user information. HaloDoc also provides digital guides and simple education for the public to make it easier to understand and use the application independently.'

In terms of stock management and distribution, HaloDoc uses artificial intelligence and cloud-based systems to predict patient needs and automatically manage drug delivery, minimising the potential for stock-outs or delays. This innovation encourages the integration of smart technologies in the healthcare supply chain, which has been shown to contribute significantly to improving operational efficiency, speed of service, and patient satisfaction. Overall, the success of HaloDoc's digital supply chain implementation is highly dependent on the readiness of the digital infrastructure at the spoke points, the quality of service at every level, and the adaptive strategies the company adopts to deal with challenges on the ground. Improving the quality of healthcare services in the spoke area is key to increasing patient satisfaction and building loyalty for future use of similar services.

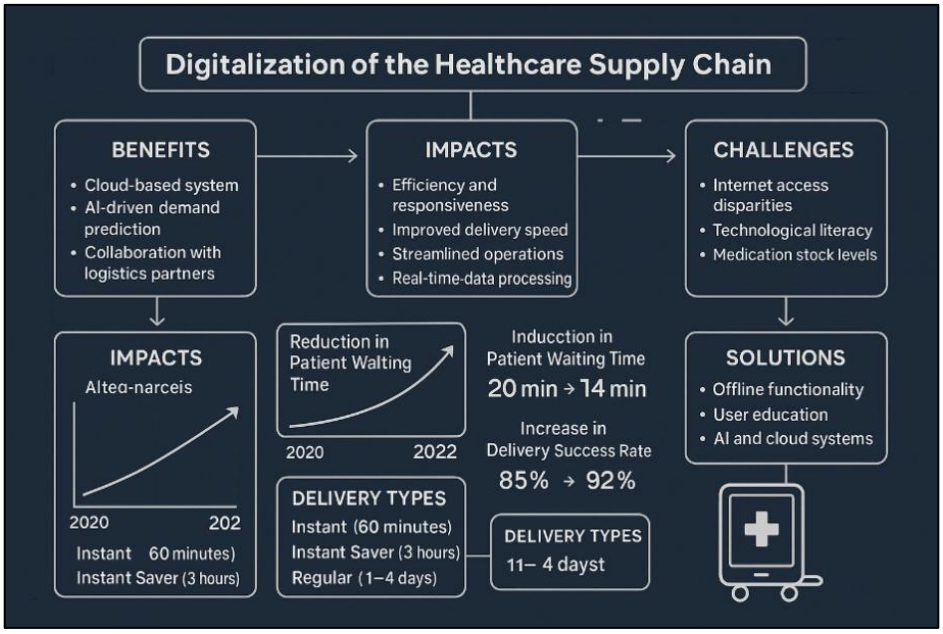

Figure 5. Digitalization of the Healthcare Supply Chain

Based on Figure 1, it can be seen that digitalisation in the healthcare supply chain provides a number of interrelated benefits, impacts, challenges, and solutions. Some of the main benefits resulting from the implementation of this digital-based system include the use of cloud-based systems, AI-based demand prediction, and collaboration with logistics partners. These benefits then have an impact on improving service efficiency and responsiveness, accelerating delivery times, simplifying operations, and real-time data processing capabilities. A significant impact is shown in the Altea-narceis chart, where there is an improvement in service quality from 2020 to 2022, particularly in terms of reducing patient waiting times. In 2020, the average patient waiting time was 20 minutes, and was reduced to 14 minutes by 2022. In addition, the delivery success rate also increased from 85% to 92%. As for the type of delivery service, this digital system offers several options, namely Instant Delivery (60 minutes), Instant Saver (3 hours), and Regular Delivery (1-4 days), which allows flexibility according to the needs of patients or health facilities.

However, digitisation of the healthcare supply chain also faces a number of challenges, such as inequality in internet access between regions, low technological literacy, and fluctuations in drug stocks in some locations. Therefore, the proposed solutions include developing offline features, improving user education, and optimising the use of AI and cloud systems to support services in various infrastructure conditions. Overall, Figure 1 shows that digitisation of the healthcare supply chain not only plays a role in accelerating services, but also improves distribution effectiveness and patient satisfaction, although it still requires solutions to overcome obstacles in the field.

CONCLUSION

Based on the results of the study, it can be concluded that the digitalisation of the supply chain implemented by HaloDoc can improve the efficiency, speed and quality of digital-based health services. The utilisation of technologies such as artificial intelligence, big data, and cloud-based systems is proven to help companies predict patient needs and accelerate the drug distribution process in a timely manner. For practitioners and managers of digital health services, the results of this study provide an overview of the importance of integrated supply chain management to maintain smooth operations and user satisfaction. However, this research has limitations because it is only a literature study and has not involved direct field data. Therefore, it is recommended that future research can conduct empirical observations or surveys of patients, medical personnel, and distribution partners to obtain more in-depth and comprehensive results.

RECOMMENDATIONS

The results showed that digitalisation of the supply chain at HaloDoc increased the speed of drug distribution, reduced patient waiting times, and expanded service coverage to remote areas. The integration of technologies such as Artificial Intelligence, cloud computing, and big data analytics also strengthens the efficiency of drug stock management and real-time prediction of patient needs. In conclusion, the implementation of a technology-based digital supply chain at HaloDoc has proven effective in improving operational efficiency and the quality of digital health services in Indonesia. The limitation of this research lies in the scope of the study which only uses secondary data, so it is recommended that future research use direct interview methods or case studies to get a more comprehensive perspective from internal companies and service users.

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