

Digital Transformation at Regional General Hospitals of Prof. dr. H.M. Anwar Makkatutu, Bantaeng Regency

Muhajir

Student of Public Administration Science Doctoral Program, Universitas Negeri Makassar, Indonesia
Email: muhajir.bone@gmail.com

Haedar Akib

Postgraduate Universitas Negeri Makassar, Indonesia

Risma Niswaty

Postgraduate Universitas Negeri Makassar, Indonesia

Korespondensi penulis: muhajir.bone@gmail.com

Abstract. Hospitals need adaptation to environmental changes and demands that change rapidly and dynamically. Digital transformation contributes to reducing costs, increasing speed and transparency. The purpose of the research is to describe the implementation, identify the determinants and digital transformation strategies. The method uses a qualitative approach with informants from structural officials, heads of installations, staff, and patients with a total of 15 people. Data were obtained through interviews, observation, and documentation. The results showed that the hospital implemented digital transformation refers to the Generic Process Transformation Model Theory by adding cooperation in the operative stage. The reason for the dominant digital transformation is the need for officers and patients as well as superior services. Impacts include increasing speed, efficiency, transparency, and accountability. The determinant factors include officer competence, teamwork, market strategy, regulation, and cooperation. The dominant inhibiting factors are the comfort zone, sectoral ego, and lack of literacy. According to Albukhitan, there is an update on the digital transformation strategy with the appearance of working together and cultivating innovation.

Keywords: Transformation, digital, hospital.

1. INTRODUCTION

Hospitals require change as a form of adaptation to environmental changes and demands that change rapidly and dynamically. if you want to exist, compete and be an option for the community. On the other hand, hospitals have characteristics that are capital-intensive, profession-intensive, technology-intensive, interaction-intensive, and product-intensive. According to Furtner et al. (2022) some developments, including increasing regulatory and compliance scrutiny, increasing expectations of transparency, and increasingly vocal patients, are driving the transformation. According to Ferbriaty et al. (2020), organizations follow the

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* Muhajir, e-mail : muhajir.bone@gmail.com

dynamics of change, including competition, cultural shifts, challenges in product creation, quality services, and demands for the use of information technology. According to Sajadi et al. (2017), information technology improves access and quality of services in hospitals, and Kraus et al. (2021), the use of information technology will increase operational efficiency and hospital resilience.

Complaints of slow service, openness, fraud, difficult access, and long waiting times are problems that need a solution. The presence of the covid 19 pandemic, since 2020, has changed the pattern of service. The adaptation is by utilizing information technology. In line with Sofianto (2020), the direct contribution of the use of information technology in public services is can provide service support that is fast, precise, easy, cheap, fair, and transparent. For hospitals, the implementation of this system increases work efficiency, increases speed, and ease of service. According to Wang et al. (2018) effective transformation is carried out through transformation practices with information technology. According to Tanniru, Khuntia, and Weiner (2018), information technology contributes to cost reduction, service differentiation, and business strategy.

This hospital has utilized information technology in the hospital management information system since 2017, using the Khanza application which is free, and. developed to be used for all needs in the hospital, but not optimal. Medical record files are still manual, so there are obstacles, among others, readability of writed, and compliance with filling in 24 hours is still lacking. On the other hand, the benefits of SIMRS implementation have been felt, including data integration, ease of making reports, cost savings, transparency, and fast registration. Today's hospital customers, it can be said that living by utilizing information technology via mobile phones with many applications can make it easier. With the covid 19 pandemic, there is a ban on groups or crowds. An effective solution is online services, including registration, health promotion education, meetings, and other services. The Covid 19 pandemic has changed the pattern of hospital services to the community. According to Sisca et al., (2021) states that needs are always changing all the time, so if you don't make changes, the institution will not last long because customers switch to other companies that offer better and more attractive products. According to Westerman & Bonnet, (2015) in Fenech, Baguant, and Ivanov (2019) digital transformation, changing the way organizations relate to customers, how to carry out their activities, how to do business models, and how to organize. Related to this, the research will identify the implementation, determinant factors, and digital transformation

strategies at regional general hospital (RGH) of Prof.dr.H.M. Anwar Makkatutu, Bantaeng Regency..

2. METHOD

The method used in this research is descriptive with a qualitative approach. This study aims to describe the implementation, determinant factors and digital transformation strategies at RGH of Prof.dr.H.M. Anwar Makkatutu. The research informants consisted of hospital management (structural officials), installation heads, staff, and patients with a total of 15 people. This research collects primary data and secondary data. Primary data obtained from in-depth interviews and observations. Secondary data obtained from documentation and literature studies. The data collection tools are interview guides, checklist sheets, tape recorders, documentation and field notes. Validation of data is done by observation and triangulation. The research was conducted from March to September 2022 at regional general hospital (RGH) of Prof.dr.H.M. Anwar Makkatutu, Bantaeng Regency.

3. RESULTS AND DISCUSSION

a. Implementation of Digital Transformation

This hospital has utilized information technology in the hospital management information system since 2017 using the Khanza application is free and developed to be used for all needs in the hospital, but not optimal. Medical record files are still manual, so there are obstacles among others, readability of writing, and compliance with filling in 24 hours is still lacking. On the other hand, the benefits of SIMRS implementation have been felt, including data integration, ease of making reports, cost savings, transparency, and fast registration. Today's hospital customers, it said that living by utilizing information technology via mobile phones with many applications can make it easier. With the covid 19 pandemic, there is a ban on groups or crowds. Solution is online services, including registration, health promotion education, meetings, and other services. The Covid 19 pandemic has changed the pattern of services to the community. According to Sisca et al. (2021) states that needs are usually change all the time, so if you don't make changes, the institution will not last long because customers go to other companies that offer better and more attractive products. According to Westerman & Bonnet (2015) in Fenech, Baguant, and Ivanov (2019), digital transformation changing the way organizations relate to customers, how to carry out their activities, how to do business models, and how to organize. The research will identify the implementation, determinant

factors, and digital transformation strategies at RGH of Prof.dr.H.M. Anwar Makkatutu, Bantaeng Regency..

The benefits obtained from the use of information technology from the interview results are 1) fast and precise service, 2) transparency and accountability, 3) cost efficiency, 4) differentiation of health service products, 5) improvement of business strategy, 6) avoiding crowds or keep your distance, 7) hospital marketing and 8) online meeting/learning media. Meanwhile, the negative impact of the use of information technology, among others, is 1) not having mastery of the manual system, 2) the use of technology will lead to boredom, and 3) changes in the eating culture pattern of the officers. An interesting fact about changing diets starts with the convenience of shopping for food, thereby reducing activity. Start from shopping for ingredients, and processing raw materials for managing ingredients into finished food. With the online delivery order shopping application, officers have very light activities so that more calories are stored in the body. As a result, convenience of shopping has caused some officers to gain weight. Hospital digital transformation can be described as follows

Table 1 Digital Transformation at RGH of Prof.dr. H.M. Anwar Makkatutu

Before 2017	Since 2017
Has less than 20 computers and is only used for typing administration and preparing report documents	Each room, unit, installation, and section/field has computer and printing facilities, and 95% connected to the Hospital Management Information System program developed through the Khanza application
The data is calculated using the Microsoft Excel program	Service data, financial data, and administrative data (planning, and other data) have been integrated and calculated automatically in the system.
The application program is limited to planning applications, online hospital indicator budgeting and reporting, government goods procurement	Additional applications including <ol style="list-style-type: none"> 1. Online registration service with the SI PANDAI application 2. Attendance and realization of civil servant performance using the e-performance application with an Android Cellular hand phone, to improve discipline and performance 3. Survey of customer loyalty and satisfaction with the application 4. Report on the use and stock of medical gases, blood, and medicines 5. Drug education with applications

applications	<ol style="list-style-type: none">6. Hand washing steps7. Reminder to take medicine regularly8. Workshops, evaluation meetings, and training for the majority of zoom meetings9. Reporting on the management of Hazardous and Toxic Materials to the South Sulawesi Provincial Environmental Management Office10. Patient referral system with referral system application11. BPJS with mobile JKN, for information on health facilities12. The State Civil Service Agency developed the MySAPK application13. The Ministry of Health develops the SISDMK application which provides information on the state of health and human resources in Indonesia14. SIDOKAR application for managing accreditation documents15. Use of online delivery order shopping applications to meet the fashion, food, and drink needs of employees
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In carrying out digital transformation, the management RGH of Prof dr.H.M. Anwar Makkatutu especially SIMRS took the following steps; 1) realizing the importance and communicating and coordinating with the field and installation of information and health promotion, 2) in the transition period, preparing policies, guidelines, and standard operating procedures, procuring computers and their networks and outreach, 3) analyzing the advantages and disadvantages of using information technology, 4) identification of processes and systems that require information technology services 5) designing menus and integrating menus in applications, 6) internal training for personal units/installations and external training for information technology officers, 7) utilization of information technology as a culture in hospitals, 8) complete the system with safety installations to anticipate power outages and maintenance of the system. 9) implement the system on time. 10) the system is evaluated and monitored for improvement, and 11) collaboration with application developers.

RGH of Prof. dr. H.M. Anwar Makkatutu has undergone some transformations since its founding in 1921 including digital transformation, Kadjatmiko (2003) that organizational transformation is an organizational change from current conditions to expected conditions. The Generic Process Transformation Model theory according to Hernaus (2008) is transformation with a focus on process changes within the organization. This model has 3 (three) stages, namely: 1) the strategic phase where the organization realizes the importance of change for the

progress of the organization; 2) the transitional phase, namely the transitional phase of the organization to make changes; 3) the operative phase, namely making changes based on the processes implemented in the organization. In the operative phase, there are 8 (eight) steps, namely (1) strategy analysis; (2) identification of the main processes in the organization; (3) redesigning the implementation of processes in the business; (4) carrying out various transition processes; (5) developing an appropriate organizational culture; (6) building a support system; (7) implementing process mechanisms; (8) continuously improve the precision of the process. From the results of the research, it was found that there was an update of the theory by adding cooperative steps. In the current era, no public service institution can exist by working alone but must cooperate with other institutions, both government and non-government. The hospital as a public service institution with the status of implementing the Financial Management Pattern of the Regional Public Service Agency has the authority and flexibility..

According to the author, effective steps for digital transformation for hospitals are 1) the analysis stage, 2) awareness of the need for digital transformation, 3) encouraging a culture of innovation, 4) testing new technologies, 5) creating strategic guidelines for success, 6) identifying targets, and 7) adapt. Efforts to succeed by executing; 1) financial planning or business strategic plans, 2) performance indicators, 3) tools and processes, 4) the existence of a team of experts, 5) the impact of transformation for employees and customers, and 6) transformative leadership. According to Verhoef et al. (2021), digital transformation and the resulting business model innovations are fundamentally change consumer expectations and behavior, placing enormous pressure on institutions. The three stages of digital transformation: digitization, digitalization, and digital transformation. External control stages of digital transformation include technology, competition, and digital customer behavior. Next phase includes digitization, digitalization, and digital transformation and the imperative strategic stage of digital transformation.

Transformation of conventional service culture to a culture of using information technology. It is hoped that the bad impression of hospital services will change with the presence of digital services. By utilizing information technology become easily accessible. Online registration, for example, can be done anywhere, easily done in a very short time. No longer carrying reference files because it has been integrated into the system. Likewise, their data is integrated into a safe condition. Waiting time for medical record files is very short. The data in question has been entered into the hospital management information system..

The next expectation is a short waiting time. Patients who have registered, do not wait

long to get the service, can manage the time of arrival, do not expect boredom, more complete information because hospital information can be accessed through the hospital application and the web. Services are provided fairly. All patients wish to get early service after registering online. Outpatient service and queues should not exclude the elderly, pregnant women, and people with disabilities as a prioritized group. They should receive services in a special place, separate from and not disturb the services of other patients. If there are enough human resources, for example, more than one specialist doctor, then separate services can be provided. Sufficient human resources can be organized to support priority service innovation so that online services are not interrupted by priority services. The key is policy, regulation, and commitment to compliance. Another expectation of patients is that the cost of health services with digital is accurate and costs less.

Digital services that are accurate and lower in cost have not met patients' expectations. Patients want digital services that are simple in form and easy to understand and apply. With the Covid 19 pandemic, digital services are very useful, needed, and need to be developed. So that it will further minimize the risk of transmission in health facilities. Some obstacles for patients are 1) lack of information, or not knowing where to ask or not knowing who can provide information and teach 2) technology stuttering 3) not having a personal cellphone, and sharing a cellphone with family, 4) signal conditions that do not support application utilization, 5) conventional registration habit factors. Feeling invalid if they do not register directly because there is a feeling of doubt when accessing online services. Is it true that the registration data or online service is accessed? 6) unclear arrival time of doctors. The majority have not fulfilled the service promise as informed. So even though the registration service has determined the estimated service hours, it is still inaccurate by being slow or unclear when the service starts. Only a few doctors kept their service hours. The speed of service is also affected by the simultaneous receipt of prescriptions at the pharmacy. Completion of drugs, specially compounded drugs, takes a long time. The long wait at the pharmacy makes patients bored, and impatient and often leads to complaints. Although there is a drug delivery service, it is only for services within a certain area with a maximum radius of 3 km and only for priority patients (elderly, pregnant women, and disabled).

According to patients, digital transformation has changed many hospital services, including the culture of serving officers. Officers are faster in completing requests for administrative services, both certificates, financial administration services, and other services. Furthermore, officers rarely leave the room, they communicate with the use of information

technology. Certain meetings and training are conducted online and officers follow in their respective rooms. Even food for officers is ordered through online delivery orders. It does not inconvenience officers to leave the room and spend some time just eating and drinking. So that there is more time to serve patients and focus, both on monitoring, examination, and other services.

Patients realize that currently, health facilities are many and on average easily accessible, so there are choices, even though BPJS patients must follow the existing referral system. Each facility is competing to offer innovative health service products. Furthermore, the development of digital medical device technology that increases patient awareness and can be trusted to be able to meet the needs, expectations, and sacrifices of patients, in obtaining the promised benefits. According to Purcărea (2016), the findings show that patients can better meet their expectations due to stakeholders' commitment to innovation in the context of digital transformation, and more and more innovative products are being introduced, targeting new patient segments and building new cultural values. Meanwhile, according to Leonardsen et al. (2020) that the experience in health services with the use of information technology will have an impact on everyday life.

Table 2. Service Changes in Hospital Digital Transformation

Before 2017	Since 2017
Manual service (conventional)	Service with digital (utilization of information technology)
Long service waiting time	Faster service waiting time
Unable to set arrival time flexibly	The arrival of patients to the hospital can be arranged by the system, so that patients do not wait long
Service registration must come directly face-to-face	Registration in service face-to-face, can be done online anywhere
Rigid and closed services	Services with open information (transparent)
Services with manual systems are very slow from unit to unit	Services are fast because the data has integrated
Fulfillment of photocopies of files in the requirements to receive services	There is no longer a requirement for photocopying files because the data and requirements have been stored and integrated into the system, so there are cost savings
The writing on the doctor's prescription and the writing in the medical record, are often difficult to read, and take time to confirm back	The writing is very clear to read because it has been entered into the system by doctors and other health workers.
Conventionally, medical record files	There is no accumulation of files,

accumulate very quickly and require the addition of a large room to accommodate the addition of files from time to time and with special security of documents to avoid damage, wetness, loss, misplacement, misappropriation, incompleteness, and other problems.	system, data security are carried out, and the system provides information for complete data filling.
The bureaucratic system for deleting old hospital medical record files is quite complicated and needs special activities according to laws and regulations	Data deletion is very simple to do in the system
Preparation of hospital financial and service performance reports takes a long time and is often wrong or in dispute	Preparation of hospital financial performance reports is fast, valid and accountable, and integrated with district government reporting, while hospital service performance reports are integrated with reporting to the ministry of health, and BPJS
Manual referral system, no guarantee of patient acceptance when referred to another hospital	Online referral system, and patients are confirmed to be accepted at a hospital before the patient is referred
Patients cannot check room availability conditions at health facilities	Patients can check and know room availability conditions at any time through the JKN mobile application, the SI PANDAI application from the Raja Smile innovation, and choose where to get the health services they want
Employee attendance and performance reporting is manual and less valid and accountable	Employee attendance and performance reporting is through an online, and calculates automatically, so the results are more valid and accountable
Officers must organize and provide time to leave the room to be able to access food and drink at food stalls	Food ordering services through online delivery orders, so that officers do not leave the room, and focus more on their duties

Services based on information technology, it has changed the pattern of hospital business. Some changes occur including relationships and communication with customers. Online communication patterns will be different from offline. These changes will have implications for performance. This is still synergistic with Bell, Lee, & Yeung (2006), digital transformation has produced further implications for the role of HR, its capabilities, and competencies. This concept states that the capacity and ability of HR will change for the better by utilizing digital technology and this will affect the organization's ability to transform. Meanwhile, Westerman & Bonnet, (2015) in Fenech, Baguant, and Ivanov (2019) digital

transformation, changes the way organizations relate to customers, how to carry out their activities, how business models, and how to organize. According to Fischer et al. (2020) digital technology connects people, objects, and locations to generate and analyze large amounts of data, digitalization and digitalization merge into digital transformation.

b. Determinants of Digital Transformation

The determinants of digital transformation are 1) the availability of competent human resources, 2) the vision of top management, 3) there is teamwork 4) leadership 5) market strategy, 6) employees have the desire to learn, and 7) factors of shame and prestige, 8) the existence of regulations for implementing a digitalization system and 9) cooperation with Khanza. Meanwhile, the inhibiting factors are 1) the nature of employees who do not want to be complicated with the application (Bodo Susah = in Makassar language), 2) feel there is no need for new changes, 3) already want to retire, 4) sectoral ego, 5) lack of commitment of unit/installation administration officers for continuous data entry 6) the service sharing system has not referred to the remuneration system, 7) middle management that does not fully understand the concept of digital transformation, 8) lack of commitment in providing facilities, 9) lack of evaluation and monitoring, 10) perception of happy leaders, and 11) literacy about information technology is still lacking. The efforts to anticipate rejection are (1) conducting socialization, (2) the installation approach, (3) conducting technology utilization training, and (4) encouraging creativity and innovation. The findings of obstacles are synergistic with the findings in the research of Buvat et al. (2017) that the factors inhibiting transformation include a culture that is difficult to change, lack of employee digital expertise, small change initiatives because they are not compensated for learning and there are no incentives. Meanwhile, according to Lammers et al. (2019) and Mahmood et al. (2019) in Jones et al. (2021), barriers are financing, knowledge and skills and policies, ineffective strategies, technological disruption, and strategy integration. Efforts to anticipate rejection according to Sutrisno (2018) efforts to anticipate rejection of transformation, namely by (1) informing, socializing, and convincing, (2) inspiring, (3) directing, (4) individual approach, (5) providing support, (6) preparing and developing individual abilities, (7) increasing creativity and innovation, (8) letting individuals choose attitudes, (9) negotiation, (10) team approach, (11) giving concrete examples/results, (12) developing a conducive organizational design and climate and (13) coercion. According to Fischer et al. (2020) in managing aspects of digitization using information systems, it is necessary to rely on a holistic approach.

According to Mooij et al. (2022), several things need to be considered in digital transformation, namely a holistic vision that reflects long-term needs, accommodates fluctuating emotional and medical needs, provides a flexible and coordinated system of tools and resources, provides opportunities for participation, builds relationships and continuity throughout the experience, not just during visits, creates opportunities for meaningful patient contributions and connections with colleagues, shifts from transactional contacts to two-way partnerships, builds patient orientation, changes team roles and must have the flexibility to carry out various activities, and technological infrastructure must support cross-group relationships.

c. Digital Transformation Strategy

Hospital accreditation activities require the use of information technology in the governance of the hospital management information system with the SISMADAK application and then finally with the SIDOKAR application. Accreditation also regulates policies, guidelines or guidelines, and standard operating procedures. Efforts that have been made by hospital management are 1) making policies, guidelines and standard operating procedures 2) preparation and capacity building of human resources with socialization and application training, 3) System security and maintenance, and 4) development and adjusting of applications to the needs. 5) establishment of a responsible installation, 6) utilization in service innovation, and 7) establishment of digitization indicators and targets. Some service innovations have utilized information technology. There are several things done by the hospital as a digital transformation strategy, namely 1) creating goals so that services are faster, efficient, safe, transparent and accountable, 2) assessing the hospital's digital transformation capabilities, 3) designing users and how officers carry out employee experiences by making policies, guidelines and standard operating procedures, 4) calculating and analyzing advantages and disadvantages and selecting technology provider vendors, looking at efficiency factors, 5) making an implementation roadmap and 6) adjusting the use of technology to hospital culture and preparing infrastructure so that digital transformation can have a positive impact on services in hospitals, both hospitals and customers 7) establishing cooperation with relevant stakeholders, both government and private agencies, namely the district communication information office, PT Telkom, non-governmental organizations, and youth organizations 8) cultivating the birth of innovation using information technology. This strategy is synergistic with Albuqhitan's research (2020) which states that digital transformation strategies include 1) creating a vision and goals, 2) assessing the organization's digital transformation capabilities

3) designing end-user and employee experiences, 4) reviewing and selecting technology provider solutions and vendors, 5) creating an implementation roadmap and 6) adjusting culture and preparing the infrastructure. There is an update to the findings, namely the addition of aspects of establishing cooperation and cultivating innovation. This shows that cooperation and innovation are important aspects of digital transformation in hospitals. No organization can exist today if it does not cooperate. Many challenges cannot be overcome and controlled by working normally, but can only be solved by innovation

The strategies that have been carried out pay attention to several things, namely 1) readiness and selection of information technology used, where the hospital must know the internal and external conditions as well as the ability to invest and provide human resources so that it can choose the information technology to be used. 2) transformation planning, by preparing a strategic plan, to map business development from time to time with the support of information technology, 3) support for employees who have competence by giving awards and promoting self-potential development by providing opportunities to carry out education and training activities or comparative studies, 4) open space for open communication, collaboration, and free creativity, to enable the emergence of safe, comfortable conditions at work as well as giving birth to new ideas or innovations, 5) leaders provide strong encouragement, provide good examples to inspire staff, 6) which model or position of digital transformation is desired. Meanwhile, hospitals need to see which digital transformation model is suitable. Selection of process areas and business models, business domains, and hospital business culture. According to Verina & Titko (2019) in the digital transformation business process, there are business activities, and business operations, while in the business model there are operational models, business lines, and strategies.

Strategies for accelerating digital transformation by setting policies, and synchronizing with local governments and the ministry of health and related ministries. Furthermore, mapping needs, fulfilling the number and quality of human resources, preparing hospital business plans in line with digital transformation, preparing guidelines and standard operating procedures, developing systems, and fulfilling facilities according to the needs of digital transformation desired by the hospital. The impact is that hospital services are easier, faster, and more accurate. With the Covid 19 pandemic, digital marketing is one of the strategic solutions. According to Sembiluh & Sulistiadi's research (2022) that digital marketing in hospitals during a pandemic provides benefits, namely attracting new patients, developing business, strengthening customer

/ patient trust, increasing customer/patient loyalty, motivating patients to use hospital services and introducing them to their relatives and family. According to Albukhitan (2020) the digital transformation strategy includes 1) creating a vision and goals, 2) assessing the organization's digital transformation capabilities 3) designing the end user and employee experience, 4) reviewing and selecting technology provider solutions, and vendors, 5) create an implementation roadmap and 6) adjust the culture and prepare the infrastructure. Meanwhile, according to Verhoef et al. (2021), it is necessary to prepare digital resources, organizational structure, growth strategy, indicators, and goals. Meanwhile, Fischer et al. (2020), must formulate a digital strategy that defines goals and actions, and considers governance and compliance.

4. CONCLUSION

The hospital implemented digital transformation referring to the Generic Process Transformation Model theory with the update of adding aspects of cooperation at the operative stage. Some determinant and inhibiting factors were found. Determinant factors include the availability of competent staff, teamwork, market strategy, regulation, and cooperation. The inhibiting factors include being in a comfort zone, so they feel there is no need for new changes, retirement, sectoral ego, and lack of officer commitment. There is an update to the theory of digital transformation strategy according to Albukhitan with the addition of cooperation and cultivating innovation.

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REFERENCE

- Albukhitan, S. (2020). Developing Digital Transformation Strategy for Manufacturing. *Procedia Computer Science*, 170, 664–671. <https://doi.org/10.1016/j.procs.2020.03.173>
- Bell, B. S., Lee, S., & Yeung, S. K. (2006). The Impact of eHR on Professional Competence in HRM: Implications for the Development of HR Professionals. *Human Resource Management*, 45, 295–308.
- Buvat, J., Solis, B., Crummener, C., Aboud, C., Kar, K., Aoufi, H. E., & Sengupta, A. (2017). The Digital Culture Challenge: Closing the Employee-Leadership Gap. *Digital Transformation Institute*, 1–32.
- Fenech, R., Baguant, P., & Ivanov, D. (2019). The Changing Role of Human Resource Management in an Era of Dgital Transformation. *Journal of Management Information and Decision Science*, 22(2), 176–180.
- Ferbriaty, Revida, E., Simarmata, J., Suleman, A. R., Hasibuan, A., Purba, S., Butarbutar, M., & Saputra, S. (2020). *Manajemen Perubahan Perusahaan di Era Transformasi Digital* (A. Rikki (ed.); 1st ed.). Medan: Yayasan Kita Menulis.
- Fischer, M., Imgrund, F., Janiesch, C., & Winkelmann, A. (2020). Strategy archetypes for digital transformation: Defining meta objectives using business process management. *Information and Management*, 57(5), 103262. <https://doi.org/10.1016/j.im.2019.103262>
- Furtner, D., Prakash, S., Manmohan, S., Chew, S., Wong, H., & Setia, S. (2022). Digital Transformation in Medical Affairs Sparked by the Pandemic : Insights and Learnings from COVID - 19 Era and Beyond. *Pharmaceutical Medicine*, 36(1), 1–10. <https://doi.org/10.1007/s40290-021-00412-w>
- Hernaus, T. (2008). Generic Process Transformation Model: Transition to Process-based Organization. *Working Paper Series: Paper No. 08-07*, 385(08), 1–16.
- Jones, M. D., Hutcheson, S., & Camba, J. D. (2021). Past, present, and future barriers to digital transformation in manufacturing: A review. *Journal of Manufacturing Systems*, 60(March), 936–948. <https://doi.org/10.1016/j.jmsy.2021.03.006>
- Kadajatmiko. (2003). Perspektif Dan Heuristik Transformasi Organisasi. In *Usahawan: Vol. 12 TH XXXI* (pp. 34–40).
- Kraus, S., Schiavone, F., Pluzhnikova, A., & Invernizzi, A. C. (2021). Digital Transformation in Health Care: Analyzing the Current State-of-Research. *Journal of Business Research*, 123, 557–567. <https://doi.org/10.1016/j.jbusres.2020.10.030>
- Leonardsen, A. L., Hardeland, C., Helgesen, A. K., & Grøndahl, V. A. (2020). Patient experiences with technology enabled care across healthcare settings- a systematic review. *BMC Health Services Research*, 20(779), 1–17.
- Mooij, M. De, Foss, O., & Brost, B. (2022). Integrating the experience : Principles for digital transformation across the patient journey. *Digital Health*, 8, 1–7. <https://doi.org/10.1177/20552076221089100>

- Purcărea, T. V. (2016). Creating the ideal patient experience. *Journal of Medicine and Life*, 9(4), 380–385. <https://doi.org/10.22336/jml.2016.0411>
- Sajadi, H., Sajadi, Z., Sajadi, F., Hadi, M., & Zahmatkesh, M. (2017). The comparison of hospitals' performance indicators before and after the Iran's hospital care transformations plan. *Journal of Education and Health Promotion*, 6, 1–6. <https://doi.org/10.4103/jehp.jehp>
- Sembiluh, D., & Sulistiadi, W. (2022). Analisis Implementasi Pemasaran Digital di Rumah Sakit pada Pandemi COVID-19: Literatur Review. *Media Publikasi Promosi Kesehatan Indonesia (MPPKI)*, 5(3), 224–232. <https://doi.org/10.56338/mppki.v5i3.2135>
- Sisca, Simarmata, H. M. P., Grace, E., Purba, B., Dewi, I. K., Silalahi, M., Fajrillah, Sudarso, A., & Sudarmanto, E. (2021). *Manajemen Inovasi* (J. Simarmata (ed.); 1st ed.). Yayasan Kita Menulis.
- Sofianto, A. (2020). Inovasi Layanan Berbasis Teknologi informasi pada Rumah Sakit sebagai Bentuk Reformasi Birokrasi. *Jurnal Litbang Provinsi Jawa Tengah*, 18(1), 81–102.
- Sutrisno, E. (2018). *Budaya Organisasi* (5th ed.). Jakarta: Prenadamedia Group.
- Tanniru, M., Khuntia, J., & Weiner, J. (2018). Hospital Leadership in Support of Digital Transformation. *Pacific Asia Journal of the Association for Information Systems*, 10(3), 1–24. <https://doi.org/10.17705/1pais.10301>
- Verhoef, P. C., Broekhuizen, T., Bart, Y., Bhattacharya, A., Qi Dong, J., Fabian, N., & Haenlein, M. (2021). Digital transformation: A multidisciplinary reflection and research agenda. *Journal of Business Research*, 122(July 2018), 889–901. <https://doi.org/10.1016/j.jbusres.2019.09.022>
- Verina, N., & Titko, J. (2019). Digital transformation: conceptual framework. *Proceedings of 6th International Scientific Conference Contemporary Issues in Business, Management and Economics Engineering '2019*. <https://doi.org/10.3846/cibmee.2019.073>
- Wang, Y., Kung, L. A., Wang, W. Y. C., & Cegielski, C. G. (2018). An integrated big data analytics-enabled transformation model: Application to health care. *Information and Management*, 55(1), 64–79. <https://doi.org/10.1016/j.im.2017.04.001>