

ENTERPRISE INTERNAL STRATEGY AT MANAGEMENT INFORMATION SYSTEM “KHANZA” MUHAMMADIYAH SIDOARJO HOSPITAL

Eka Risma Wahyuni, Rita Ambarwati¹, Misti Hariasih

Department of Management, Faculty of Business Law and Social Science, Universitas Muhammadiyah Sidoarjo
Jl. Mojopahit No.666 B, Sidowayah, Celep, Sidoarjo, East Java 61215, Indonesia

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Abstract:

Background: Management Strategy using SI/TI Strategy in operational management and logistics at Muhammadiyah Sidoarjo Hospital with the SIMRS Khanza application is one of the programs that supports active management and logistics at Muhammadiyah Sidoarjo Hospital. The primary objective is to know SIMRS Khanza's operational management and logistics performance to improve service quality.

Purpose: Find the Management Strategy using IS/IT Strategy in operational and logistics management at Muhammadiyah Hospital Sidoarjo with the SIMRS Khanza application.

Design/methodology/approach: This research uses a descriptive qualitative approach. According to Porter's Value Chain Model, the data collection and analysis stages used value chain analysis. The study results show that Muhammadiyah Sidoarjo Hospital needs to improve operational and logistical management by emphasising IS/IT strategic planning and developing hospital websites and medical records to support services, health services, administration, and research. Analysis of Porter's Value Chain Model explains that the Sidoarjo Muhammadiyah Hospital carried out two activities related to improving services at the Sidoarjo Muhammadiyah Hospital.

Findings/Result: The main activities include Inbound logistics, Operations, Outbound Logistics, Marketing and Sales, and Service. Supporting activities include Firm Infrastructure, Human Resource Management, Technology Development, and Procurement. Muhammadiyah Hospital conducted two exercises to improve services at Muhammadiyah Sidoarjo Hospital.

Conclusion: This study found that the main activities in service improvement include inbound logistics, operations, outbound logistics, marketing and sales, and service.

Originality/value (State of the art): This study is original in applying Porter's Value Chain Model to analyse IS/IT strategy in operational and logistics management at Muhammadiyah Hospital Sidoarjo, primarily through implementing the SIMRS Khanza application.

Keywords: IS/IT strategy, management hospital, management strategy, operational and logistics, value chain

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¹ Alamat Korespondensi:
Email: ritaambarwati@umsida.ac.id

INTRODUCTION

Management of an institution's operational performance system or organisation is a crucial step to improve the quality of service, including an effort to adapt to technological developments that occur so that institutions or organisations can move dynamically and continue to innovate by the demands of technological developments. One is in hospital services, which also requires developing services to adapt to technical results. Based on the Law of the Republic of Indonesia Number 44 of 2009 concerning hospitals, a hospital is an institution that handles and carries out health care for individuals or groups in a plenary manner in inpatient, emergency, and outpatient services.

With the developments that occur, including the impact of digitalisation, there is a link between hospital services and information technology that can support and influence the activities and services provided to the community (Almutairi et al. 2021). Technological developments then demand the concept of information technology synergy with service demands (Wibowo, Sutrisno, and Kenang, 2023). Therefore, a hospital must continue to develop the quality of its services that are relevant to the current developments, especially with the inclusion of information technology (Arana et al. 2020).

To test the developments carried out by a hospital, a value chain analysis can be carried out. This analysis reviews internal policies implemented by hospital organisations in developing services (Azmat and Kummer, 2020). Included with the results of value chain analysis can also be used to design strategic steps helpful in hospital development. Predetermined strategic plans are carried out optimally for organisational goals. IS/IT strategic plans are prepared to address the global environment's current and dynamic digitalisation trends (Bandoophanit, 2020).

Value chain analysis is also valuable for measuring hospital performance that cannot be separated from what is called technological development, so for the success of hospital performance, efforts to develop information technology (IT) are the primary key to its success (Bertolin Furstenau et al. 2022). Included in hospital services, the function of this information technology service differs from not using information technology, not only being controlled but using its benefits to be a mainstay of life. (Boston, 2020).

Knowledge-based systems such as expert systems and intelligent decision technologies have been used to support healthcare workers in detecting and diagnosing patients and providing decision support for relevant health stakeholders and decision-makers in a pandemic crisis (Luo and Jiang, 2022). This is also important in health services such as hospitals. The existence of a hospital is required to be fast in providing services to the community, so with services supported by information technology, it will keep the quality of service (Faruqi, 2019).

According to the study in this study, it included the information technology strategy implemented by the Muhammadiyah Sidoarjo Hospital, whose history will always be maintained throughout its development. Sidoarjo Muhammadiyah Hospital, until now, has continuously improved its capacity to serve the community and provide good service to patients so that later, it can become the community's preferred hospital. The use of information technology by Muhammadiyah Sidoarjo Hospital is a form of adaptation to environmental changes that occur, including digitalisation. Based on this encouragement, Muhammadiyah Sidoarjo Hospital had to make changes, too, not just standing still but continuing to improve the existing deficiencies in hospital services. There are many services at Muhammadiyah Sidoarjo Hospital, ranging from outpatient services, emergency departments, general clinics, internal medicine specialist clinics, pediatric specialist clinics, surgical specialist clinics, eye specialist clinics, and ENT specialist clinics. The hospital also completes the need for operational vehicles by adding ambulances. Sidoarjo Muhammadiyah Hospital, in its process of implementing a strategic management approach, will be used as a link between the interpretation of the methods and the actions that the organisation will take for this purpose, and a strategic plan for the hospital will be developed as a guide for hospital managers for the next few years.

The development of information technology was carried out by the Hospital 'Sidoarjo Muhammadiyah Hospital by implementing the SIMRS KhanzaHMS application. The SIMRS KhanzaHMS application is a management information system used by hospitals that automatically becomes a particular hospital module and software, primarily related to the medical record process, which is 100% free forever, has no trial period, and has been used in more than 800 hospitals in

Indonesia. This is one of the advantages of the SIMRS KhanzaHMS application as part of the information technology strategy implemented by the hospital.

The SIMRS KhanzaHMS application also provides various facilities, including BPJS Bridging, Outpatient and Inpatient Medical Records, Laboratory Data, Patient Registration, Pharmacy, Delivery Room Installation Data, Employee Presence, Patient Billing, Patient Accounts Receivable, Hospital Accounting, Employee Payroll, Hospital Parking, Patient Self-Registration Platforms, Poly Queues, Counter Queues, and so on. The advantages obtained through the SIMRS KhanzaHMS application can be used for hospitals/clinics/health centres (Habib et al. 2022). The existence of the SIMRS KhanzaHMS application will also facilitate and speed up the process of services provided by the hospital.

The development of information technology is an important matter; several similar studies carried out by (Boston, 2020), (Hakam, Nugroho, and Meliala, 2017) show a gap between IS/IT standards at 'Muhammadiyah Hospital in Sidoarjo and IS/IT management architectural standards. In conclusion, to realise and achieve the vision, mission, goals, and objectives set, the development of IS/IT has become a priority for RSUD Dr. Rubini. Research by (Ariyanto, Nataliani and Sitokdana, 2021) states that planning information systems have strategic planning that supports operational activities to level sales and demand for network infrastructure, security, and sales applications following the management structure. Research by (Lestari et al. 2020) shows that the information system strategic plan for the Tompobulu Health Center is documented in an information strategy document (PSSI), which contains evidence related to IS, IT, and HR management strategies. The management effort is to develop a service system that is more integrated with information technology, thus accelerating health services.

This research examines efforts to improve services at Muhammadiyah Hospital in Sidoarjo by developing IS/IT into the SIMRS Khanza application for operational and logistics management quality. This study confirms the impact of using information technology in supporting the work operations of Muhammadiyah Hospital in Sidoarjo in detail. Several previous studies in this study discuss technology that differs from those used at Muhammadiyah Hospital in Sidoarjo. This research

study comprehensively discusses the development of IS/IT into the applications needed today so that it has a strategic plan that can benefit its users. With the IS/IT program, analysis can be conducted based on business and technical fields in polyclinics, treatment room management, and staffing information systems. There are many advantages to be gained in information technology, including acceleration and integration of information, especially in hospitals, which both use the SIMRS KhanzaHMS application.

The study's general objective was to determine how SIMRS Khanza worked on operational and logistical management at Muhammadiyah Hospital in Sidoarjo. This was specifically carried out to assess service improvements in operational and logistical management at Sidoarjo Muhammadiyah Hospital and IS/IT strategy steps in operational and logistical direction at Muhammadiyah Hospital in Sidoarjo. This study used value chain analysis following Porter's Value Chain Model to conduct an internal investigation to explore research data.

METHODS

This research uses a descriptive qualitative approach, meaning that the investigation is conducted to understand the phenomena and events to be studied based on a predetermined location or object (Creswell, 2019). The results of this study have an output in the form of a narrative test that describes the research phenomena. Especially those related to implementing the SIMRS Khanza application work on operational and logistical management at Sidoarjo Muhammadiyah Hospital as a form of information technology development.

Data collection techniques used in this study were interviews, observation, and documentation. Interviews are a technique used to communicate directly with informants in a study (Creswell, 2019). In this research, there are several informants. The first informant is the Head of the Medical Support Section, and the second is the logistics section. They provide information about the management of facility procurement at Muhammadiyah Sidoarjo Hospital. The third resource person is the Head of the General and Administrative Section, and she gives an overview of information on the service mechanism and the introduction of Muhammadiyah Sidoarjo Hospital. At the same time, the last resource person is the head of the IT department, who reviews

the steps of Muhammadiyah Sidoarjo Hospital in meeting the needs and comfort of customers, including through the development of the IS/IT system. This study conducted interviews to extract data related to applying for SIMRS Khanza's operational and logistical management work at Muhammadiyah Hospital in Sidoarjo. Observation is a technique used to observe research objects (Creswell, 2019), including events that occur in it related to the implementation of SIMRS Khanza's work on operational and logistical management at Muhammadiyah Hospital in Sidoarjo. Documentation is a data collection technique used to collect data and information directly, especially regarding SIMRS Khanza at Sidoarjo Muhammadiyah Hospital, either through journals, previous research, or official documents from Sidoarjo Muhammadiyah Hospital.

Data testing in this study was carried out using Porter's Value Chain Model, which focuses on grouping any factors related to the main and supporting activities. The stages of data collection and data analysis used in this study use value chain analysis in accordance with Porter's Value Chain Model. Figure 1 illustrates the stages of research conducted to analyse and improve hospital management using Value Chain Analysis. The process consists of several key steps, as outlined below:

- 1) Data Collection: The first stage involves gathering relevant data regarding the hospital's operations, logistics, procurement, human resources, and service delivery. This data is obtained through various methods such as surveys, interviews, observations, and hospital records.
- 2) Data Processing: Once collected, the data is processed and analysed to extract meaningful insights. This step ensures that the data is structured and ready for classification.
- 3) Classification of Activities: The processed data is categorised into different activities within the hospital's operational framework. The classification is divided into Primary Activities (operations, procurement, and services) and Supporting Activities (human resource management, administration, and technology development).
- 4) Value Chain Analysis: This stage involves analysing the primary and supporting activities to identify areas for improvement and efficiency.
- 5) Hospital's Strategic Plan Recommendation: Based on the findings of the Value Chain Analysis, strategic recommendations are developed to enhance hospital operations, integrate technology, improve procurement processes, and optimise patient care.

Value Chain Analysis: A thorough Value Chain Analysis is conducted to evaluate how these activities contribute to hospital efficiency and service quality. This analysis helps identify strengths, weaknesses, and areas for improvement in hospital management.

5) Hospital's Strategic Plan Recommendation: Strategic recommendations are developed Based on the Value Chain Analysis findings. These recommendations focus on enhancing hospital operations, integrating technology, improving procurement processes, and optimising patient care.

RESULTS

Porter's Value Chain Model in this study is specifically adapted for the hospital environment. The model consists of primary and support activities, which contribute to creating value for the organisation. The next stage is the activity classification process, which will be divided into Main Activities and Supporting Activities as follows:

Main Activities

1. Inbound logistics

Inbound logistics is one of the essential activities in a company's supply chain. This activity includes purchasing equipment or raw materials from external suppliers and is a crucial first step in production. The following table will explain further the type of equipment or raw materials needed. In carrying out activities inbound logistics, companies must pay attention to factors such as price, quality, and the available raw materials or equipment required. By optimising processes and inbound logistics, the company can ensure a timely and adequate supply of raw materials or equipment to support the smooth production process and maximise efficiency in the company's operations.

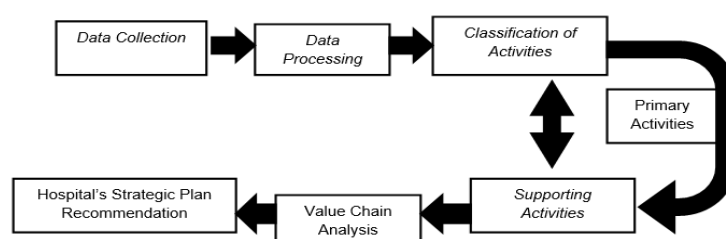


Figure 1. Flowchart of research stages

Table 1 is part of the process of inbound logistics, which describes how a facility is provided to customers. Providing facilities for inbound logistics can increase customer satisfaction by providing convenience in accessing the services and products offered by the company. For example, providing fast and reliable ambulances can help speed up the handling of patients in hospitals, thereby increasing service effectiveness and customer satisfaction.

Table 1. Inbound logistic

No	Equipment Procurement
1	Ambulance Car Procurement (Suzuki Carry)
2	Procurement of Portable Ultrasound
3	Procurement of operating room equipment and equipment
4	Genzet Procurement
5	Phototherapy Procurement
6	NST Procurement
7	Procurement of Aloka Ultrasound + Printer
8	Operational Car Procurement (APV)
9	Procurement of New Building Generator
10	Procurement of Ultrasound for Internal Medicine
11	Procurement of X-Ray Machines (Radiology)
12	Operational Car Procurement (R3)
13	Procurement of Biosafety Laboratory Equipment
14	Procurement of 4 DIMENSION Ultrasound Radiology Medical Devices
15	Innova Operational Car Procurement
16	HI ACE Ambulance Car Procurement
17	Procurement of CT Scan
18	Procurement of an automatic 400 KVA generator
19	Procurement of a 25 kg washing machine
20	Procurement of an ambulance for the body

Source: Strategic Plan for 2022 to 2026 Muhammadiyah Hospital in Sidoarjo.

2. Operations

Operations is one of the essential activities related to implementing services at 'Muhammadiyah Hospital in Sidoarjo. These operational activities include patient registration, blood sampling, medical diagnosis, medication administration, and patient care. The following is a table that will explain operational matters within the 'Muhammadiyah Hospital in Sidoarjo:

Table 2 provides an overview of the operational activities owned by the 'Muhammadiyah Hospital in Sidoarjo. Hospitals can provide optimal and satisfying customer service with complete and integrated

operations. For example, providing non-medical support services such as spiritual support can add value to customers because they feel emotionally and spiritually supported apart from receiving medical care. Optimal and comprehensive service in operational activities can help hospitals improve service quality and corporate image in customers' eyes. This can create customer trust and loyalty, thus strengthening the hospital's position in an increasingly competitive market.

3. Outbound Logistics

Activity Outbound logistics at Muhammadiyah Hospital in Sidoarjo are related to leaving the patient. Several essential activities are carried out at this stage. First, the patient's payment activity is essential in outbound logistics. Hospital Muhammadiyah Hospital in Sidoarjo provides several payment options to patients, such as cash or non-cash payments through the banking system. This payment process includes costs for outpatient care, hospitalisation, emergency care, and other medical procedures. This aims to provide patients with convenience in making payments.

Second, medical resume activity is no less important at this stage. Hospital 'Muhammadiyah Hospital in Sidoarjo. Reinforcement provides a medical resume covering the complete care and treatment performed on patients, from initial treatment to completion. This is an important form of medical documentation that will be essential in treating patients in the future.

Lastly, laboratory results are also an essential part of level outbound logistics. The doctor considers laboratory results when diagnosing and determining the proper treatment for the patient. This is important because the quality of laboratory results can affect the accuracy of the diagnosis and treatment.

4. Marketing and Sales

Marketing and sales activities are divided into direct and indirect. Direct sales and marketing activities are carried out through health promotion and hospital services; indirect activities are carried out through training, education, and training.

First, promotion is done through posters spread through the hospital's website, weekly gymnastics, and online media news about 'Sidoarjo Muhammadiyah Hospital;

this is mainly related to seminars and information about new diseases and how to prevent them. Second, as a form of training and education, nursing and medical personnel training should be held, and health certificates and research should be issued to the public.

6. Service

Service is an important activity related to service to increase customer satisfaction. Customer satisfaction can be assessed by considering several criteria, such as 1) Ambulance & Funeral Services; Hospital 'Muhammadiyah Hospital in Sidoarjo provides ambulance and hearse services 24 hours non-stop for the people of Tulungagung and its surroundings. This shows the hospital's commitment to delivering fast and appropriate emergency services. 2) Training service excellence and leadership: The hospital also provides excellent service training and leadership training to improve service quality and competence of medical personnel and employees. Thus, the services provided are expected to be better and satisfy customers.

Supporting Activities

1. Firm Infrastructure

The first support services are related to the readiness of the company's infrastructure; the first is from financial administration, starting from bookkeeping, receipts, treasury, and financial verification carried out by the Ministry of Finance. Second, the Patient Safety and Service Quality Improvement Committee carries out each service and hospital standard's quality control and performance stages. Third, an infection control prevention committee should be established for disease prevention and control. Fourth, internal supervision of each service is carried out by the Director, Deputy Director of Services, Head of Medical and Nursing Services, Head of Medical Services Section, Head of Nursing Services Section, Internal Control Unit (SPI), Supervisor, Head of Emergency Unit, Head of Room and Head of Room. Central Surgery Installation. Fifth, the Administration Section manages wealth, legislation, order, household, public, and correspondence.

Table 2. Health services

Health services		
Service Category	Kind of service	Service Details
Outpatient Medical	General clinic	Dental and general
	Specialist clinic	Internal Medicine, Pediatrics, Obstetrics & Gynecology, General Surgery, Orthopedic, Lung & Cardiac Surgery, Ophthalmology. ENT, Psychiatry
	One daycare	
Inpatient Medical		Maternity
		Adult care
		Child care
		Baby care
		Special isolation
Emergency Medical		Emergency departments
		High Care Unit
		Central Installation
Medical support		Laboratory
		radiology
		Pharmacy
		Nutrition service
		The Islamic Revival of Corpses
		Ambulance and hearse
Non-medical support services		Spiritual guidance

Source: Strategic Plan for 2022 to 2026 Muhammadiyah Hospital in Sidoarjo.

2. Human Resource Management

Human resource activities are related to staffing at 'Muhammadiyah Hospital in Sidoarjo. Staffing activities at the Hospital 'Muhammadiyah Hospital in Sidoarjo are as follows. First, the total number of human resources at 'Muhammadiyah Hospital in Sidoarjo Hospital is 194; the first organic 120 people and contracted 74 people. Second, the performance assessment of human resources is divided into two parts: organic and partners/contracts. Finally, attendance, leave permits, external services, and position mapping in each work unit are managed by the Muhammadiyah Hospital in Sidoarjo.

3. Technology Development

Activities related to technology development and research at the Muhammadiyah Hospital in Sidoarjo are in the Field of Service Control. These include the development of IS/IT, such as hospital websites, medical records, and service support applications for health services, administration, and research.

4. Procurement

Purchasing activities involve procuring goods and services under the Administrative Section (TU). Procurement of goods and services for Muhammadiyah Hospital in Sidoarjo is generally carried out through LPSE electronic procurement to increase transparency and accountability, promote fair and robust business competition, improve the efficiency of the procurement process, support monitoring and auditing processes, and meet the need for better access to information in real-time.

Based on the results of the classification of the primary and supporting activities, the value chain analysis is through the main activities, which include incoming logistics, operations, outgoing logistics, marketing, and sales, and the respective services of each activity are expected to be able to develop the best service for customers of Muhammadiyah Sidoarjo Hospital. Then, through supporting activities, which include corporate infrastructure, human resource management, technology development, and procurement, they are expected to collaborate to form a sound system or strategy for providing optimal service. One form of follow-up carried out by Muhammadiyah Sidoarjo Hospital from the results of the Value Chain analysis

is through the development of management strategies in the form of IS / IT in operational and managerial activities to improve and enhance services at Muhammadiyah Sidoarjo Hospital.

This Value Chain Model provides a structured view of how Muhammadiyah Hospital in Sidoarjo operates. The support activities help strengthen the hospital's foundation, while the primary activities focus on direct service delivery to patients. Integrating technology, efficient procurement, and quality control measures ensures that the hospital functions effectively and provides the best possible care to its patients.

Porter's Value Chain Model applied to Muhammadiyah Hospital in Sidoarjo, highlighting primary and supporting activities in the hospital's operations. Primary activities include procurement, operations, marketing, and services. Procurement involves logistics for ambulances, portable medical equipment, and medical support. Operations cover outpatient and inpatient services, medical and non-medical support, and laboratory results. Marketing focuses on external logistics, payments, and patient education, while services emphasise ambulance services and excellent training programs.

The supporting activities ensure the smooth operation of primary activities. General administration handles financial management, quality control, and internal auditing. Human resource management oversees workforce performance and training. Research, technology, and system development involve hospital websites, medical records, and digital health services. Lastly, purchasing is managed by the Administrative Section (TU) and conducted through LPSE electronic procurement, ensuring efficient procurement of goods and services. This model helps optimise hospital efficiency and enhance patient care.

Management Strategy Using IS/IT Strategy in Operational and Logistics Management at Muhammadiyah Hospital Sidoarjo

Sidoarjo Muhammadiyah Hospital has several fundamental aspects as guidelines for carrying out the operational and logistical management strategy. One factor that is the focus of this research is the activities carried out within the internal organisation. In the face of the increasingly rapid development of information technology, Muhammadiyah Hospital in Sidoarjo

establishes specific rules that must be followed in development efforts. Therefore, the activities within the internal organisation are the basis for implementing hospital operational and logistical management strategies.

Service becomes an absolute thing that is carried out perfectly. Especially for organisers, Health services such as hospitals in Indonesia, especially private hospitals, prioritise patient service and care (Improta et al. 2021). The support of expert medical personnel can provide confidence in their field. Supporting facilities will be able to help with optimal care. Hospitals that are attractive to the public have complete facilities (Kariuki and Kimani, 2021).

With increasing public awareness today, it is possible to determine which type of treatment will have more excellent value or difference (Rachmat et al. 2017). The successful operation of hospital management is inseparable from the work and development of Information Technology (IT) as a sponsor or a critical role (Katsaliaki, Galetsi, and Kumar, 2021). Due to the rapid growth of Information Technology (IT) worldwide, more and more aspects of life rely on it (Lerman et al. 2022; Syaipudin & Amalia, 2023). Information technology applied in a service aims to facilitate the flow of logistics, which in its development so far has become a science that needs to pay close attention to the history of economic growth, such as the production of goods produced by factories or companies, and how distribution and storage, and management desired product. Independent and highly managed (Bandoophanit, 2020).

There are several implications for an organisation's financial operations. In the past, it was said that logistics were inevitable; however, good logical practices can also provide opportunities to improve economic performance (Lestari et al. 2020). Logistics networks must be managed effectively and efficiently to meet the increasingly complex global market needs. In this case, the planning and management of logistics functions must be integrated into one integrated and sustainable system (Li and Wang, 2022). Hospitals must be able to control and show maximum attention to customer needs in all aspects of activities carried out, including operations and information technology (IT), which are the main functions of health services. (Lugada et al. 2022).

In dealing with existing developments, Muhammadiyah Hospital in Sidoarjo needs to make improvements with a focus on IS/IT strategic planning by the organisation. Information systems in hospitals need to be improved so that their implementation becomes more integrated to meet infrastructure needs on each network, laboratory development, medical services, human resource development, and business application development to automate business functions. Ensuring that the implemented system can be integrated with the existing infrastructure and meets the required quality standards is necessary for these improvements. In addition, it is essential to evaluate periodically to ensure that the system is still relevant to the needs and objectives of the hospital and can provide optimal benefits for customers and other stakeholders.

Service improvement in operational and logistical management at Muhammadiyah Hospital Sidoarjo

Muhammadiyah Hospital in Sidoarjo has developed IS/IT applications to support daily operational activities. Medical applications and business operations are used optimally to increase the efficiency and effectiveness of business processes within the hospital. Based on the results of the research, SIMRS Khanza has contributed to operational and logistical management at Sidoarjo Muhammadiyah Hospital. In addition, the IS/IT strategy and business strategy plan for Muhammadiyah Hospital in Sidoarjo Hospital have been adapted to the needs and objectives of the hospital. This proves that health providers have improved services under established standards, thus providing benefits for customers or patients.

Improving services, in general, is a necessity that a service institution carries out because full service is the principle of service (Xu, 2022). Improving services along with technological developments has also become necessary as a form of evolution and adaptation so that services can be integrated with digitalisation services due to changing times (Scalia and Benedettini, 2022; Amalia & Syaipudin, 2023). Service quality is the primary goal of service improvement because, with maximum service quality in the hospital as a business, the service has been carried out professionally. Professional services certainly have various quality standards, especially in services carried out by a health institution or organisation that provides services to the community (Yu, Zhang and Wang, 2022). Technological encouragement will also positively impact service

providers because it will make it easier to check track records and guarantee data accuracy when detailed data mining is required (Szmelter-Jarosz, Ghahremani-Nahr, and Nozari, 2021).

Improving health care quality, precisely and as a whole, is a complex matter. Governments within countries often rely on a few national-level programs that are expected to make progress. However, the key to this form of thinking is developing a balanced overall strategy and continuously evaluating key elements over time (Dixon, 2021). Therefore, acceleration in health services must be implemented and mandated in several regulations, especially the Regulation of the Minister of Health of the Republic of Indonesia Number 72 of 2016 concerning Pharmaceutical Service Standards in Hospitals or other health laws.

The evaluation and improvement process has an essential role in the development of an organisation. Through periodic assessment, it is possible to know the weaknesses and strengths of the organisation's operational processes. This is very important in the context of development because it can be the basis for making improvements and improving the quality of activities carried out by the organisation. In the context of Sidoarjo Muhammadiyah Hospital, an evaluation was carried out on the main and supporting activities carried out internally by the company. This is related to the value chain analysis carried out by the company. By evaluating the value chain process, companies can find opportunities to improve and improve efficiency in operational processes. In this case, the evaluation and improvement process can be a very effective effort to improve the performance of Sidoarjo Muhammadiyah Hospital and increase patient and employee satisfaction.

Managerial Implications

Implementing Porter's Value Chain Model at Muhammadiyah Sidoarjo Hospital has significant managerial implications, particularly in enhancing operational efficiency and service quality. Integrating information systems (IS) and information technology (IT) in operational and organisational activities is crucial to optimising hospital management. The hospital can improve decision-making processes, streamline workflows, and enhance patient experiences by leveraging technology in patient care, administration, and procurement.

Furthermore, effective human resource management ensures that healthcare professionals receive proper training and development, leading to better patient outcomes. The collaboration between primary and supporting activities fosters a well-structured system that enhances overall hospital performance. Efficient logistics management, procurement processes, and financial control contribute to cost-effectiveness and resource optimisation. By implementing strategic management initiatives based on the Value Chain Analysis, Muhammadiyah Sidoarjo Hospital can continuously improve service quality, ensure patient satisfaction, and maintain a competitive edge in the healthcare industry. The synergy between technology, human resources, procurement, and operations creates a sustainable healthcare system, ultimately leading to better patient care and hospital growth.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The results of this study show that through a value chain analysis approach at Muhammadiyah Sidoarjo Hospital, Muhammadiyah Hospital is carrying out two activities related to efforts to improve services at Muhammadiyah Sidoarjo Hospital. The main activities (Primary Activities) and supporting activities (Support Activities) are the two activities. Main Activities (Primary Activities) include 1) Inbound logistics related to equipment purchase; 2) Operations, namely activities related to health services; 3) Outbound Logistics, namely activities related to patients; 4) Marketing and Sales, namely activities related to marketing and sales. 5) Services, namely activities related to services to increase customer satisfaction. The supporting activities (Support Activities) include 1) Firm Infrastructure, namely activities related to hospital infrastructure. 2) Human Resource Management, namely activities related to employment. 3) Technology Development, namely activities related to technology development and research. 4) Procurement, activities related to the procurement of goods and services.

Recommendations

According to the results of this study, the managerial team at Muhammadiyah Sidoarjo Hospital needs to optimise the SIMRS Khanza application because this application has various facilities that can support

hospital operations. Muhammadiyah Sidoarjo Hospital needs to improve operational and logistics management with a focus on IS/IT strategic planning under the organisation. This study recommends that the Sidoarjo Muhammadiyah Hospital strengthen the IS/IT strategic steps by developing hospital websites and medical records and creating applications to support health services, administration, and research.

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