

Information Systems Strategic Planning in Improving Organizational Operational Management with Ward and Peppard

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ABSTRACT

The Village of Sarijadi Naturally, by hosting events like social services, Karang Taruna, one of the social institutions in the Sarijadi Village region, contributes to the community's improved social welfare. Karang Taruna requires greater input from its own community to support these initiatives, including criticism and suggestions as well as pertinent data. Not only is that data available, but other data, such minutes, schedule boards, and attendance lists, are also required in case of emergencies. Karang Taruna needs to have efficient and well-organized operational management when gathering this data in order to store the existing data effectively and reduce data loss. Karang Taruna can employ an information system to improve operational management and make better use of their available resources. A thorough and organized information system strategy planning process is necessary for creating an organization's operational management information system. The Ward and Peppard research method was applied by the author in authoring this essay. Karang Taruna can enhance operational management, aid in adaptation, and gain a deeper understanding of its external environment by employing this information system strategic planning strategy. The internal and external environments are analyzed using a number of strategic planning approaches, including SWOT analysis, value chain analysis, and five forces analysis. Ultimately, the results of this study can help firms become more sustainable by offering advice on how to create an IS/IT department and enhance operational management.

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1. INTRODUCTION

In the era of globalization and digitalization which is currently growing, followed by developments in the fields of science and technology. The very rapid development of technology today, especially in information systems and information technology (IS/IT), provides a quite significant role in various fields [1][2]. The role of IS/IT is very influential in changes in business processes in an organization which provides increased efficiency and effectiveness of organizational performance in achieving its goals and targets, and can also help organizations increase productivity and reduce costs incurred [3][4]. Organizations need information system strategic planning to achieve this [5]. This is a process that formulates long-term plans that will direct the development and management of information systems within the organization[6]. The goal is to integrate

information systems with the organization's business strategy, so that the organization can achieve its long-term goals and objectives.

Based on the Regulation of the Minister of Social Affairs of the Republic of Indonesia Number 25 of 2019 about Karang Taruna, Karang Taruna is an organization formed by the community as a forum for the young generation to develop themselves, grow and develop on the basis of awareness and social responsibility of, by and for the young generation. which is oriented towards achieving social welfare of society [1]. Social welfare is a condition where the managerial, spiritual and social needs of citizens are met so that they can live a decent life and are able to develop themselves so that they can carry out their social functions [7]. Implementation of Social Welfare is a directed, integrated and sustainable effort carried out by the government, regional government and society in the form of social services to meet the basic needs of every citizen, which includes social rehabilitation, social security, social empowerment and social protection[8][9].

Operational management is a series of planning, organizing, controlling and monitoring processes carried out in carrying out business or organizational operations[10][11]. This involves the transformation of inputs into outputs in the manufacture of products or increased usability, also includes the effective and efficient organization and coordination of various resources in an effort to achieve organizational goals [3][12]. Overall, operational management is a series of connected activities and involves decision making to organize and coordinate the use of resources to achieve organizational goals[13].

Karang Taruna Ngajomantara Sarijadi Village is one of the youth organizations in the Sarijadi Village area, Bandung City, which has an important role in improving the social welfare of its community [3]. Social services are one way that can be done to improve the social welfare of the community in an area, this can of course have an impact on the lives of the surrounding community[14][15]. As a community organization for social welfare services, Karang Taruna functions as a forum that can accommodate all aspirations and control the activities of teenagers who are not under the auspices of a political organization and do not carry out or voice any political activities [4]. Karang Taruna can hold social service activities for its community, but to support this, Karang Taruna needs input in the form of criticism and suggestions, as well as in the form of data such as data on PMKS (People with Social Welfare Problems) and PSKS (Potential and Sources of Social Welfare)[3]. But this data is sometimes not relevant to social welfare in society[16]. Karang Taruna doesn't only have PMKS and PSKS data, data such as attendance lists, activity calendars, activity documents, minutes, etc. are sometimes not well organized[17].

The Ngajomantara Youth Organization certainly has various kinds of obstacles that it faces, where one of the obstacles it is facing is operational management that has not been managed well, which can be seen from a social service perspective as well as from an organizational managerial perspective[6]. Therefore, Karang Taruna Ngajomantara needs to improve its operational management so that existing data or resources can be managed efficiently and effectively to support the organization's long-term goals and objectives. In the process of improving the organization's operational management, Karang Taruna needs an information system to support operational management. Building an information system requires a good and structured strategic planning. Information Systems Strategic Planning (PSSI) in improving organizational operational management in Karang Taruna Ngajomantara, Sarijadi Village, aims to improve social services to the community in Sarijadi Village, Bandung City, as well as improving resource management so that they can be used efficiently and effectively to achieve long-term goals and objectives. length of the organization and to be used in the future.

Based on the background previously explained, the research article for this semester's final assignment was written with the title "Strategic Planning for Information Systems in Improving Organizational Operational Management (Case Study: Karang Taruna Ngajomantara, Sarijadi Village, Bandung City)" with the hope that it can help and provide recommendations to Karang Taruna Ngajomantara Sarijadi Village for the establishment of IS/IT in operational management through better, planned and structured management of resources and improvement of social services.

2. METHOD

2.1 Literature review

2.1.1 Ward and Peppard method

Ward and Peppard is a method discovered by John Ward and Joe Peppard in 2002. The Ward and Peppard method begins with assessing and understanding the current business position of the organization or company, to determine future plans and strategies, both business strategy and IS strategy. /TI[5][18].

2.1.2 Qualitative Approach

A qualitative approach is an approach taken by explaining data and facts in the field. According to, qualitative research is research that aims to understand phenomena about what is experienced by research subjects, such as behavior, perceptions, motivations, actions, and so on holistically [4].

2.1.3 SWOT analysis

SWOT analysis is an analysis technique used in the Ward and Peppard method to analyze the strengths, weaknesses, opportunities and threats of the organization's internal and external environment [6][19].

2.1.4 Value Chain Analysis

Value Chain Analysis or value chain analysis is an analysis used by organizations or companies to identify primary and secondary activities that can add value to their products, then analyze them to reduce costs or increase differentiation, also this value chain analysis is used to analyze the organization's internal activities [7][20].

2.1.5 Porter's Five Forces analysis

According to Porter's Five Forces Analysis is a model created by Michael Porter which aims to describe a framework as an analysis of business strategy development that contributes to competitiveness and competitive advantage [8][21].

2.2 Data Collection Methods and Instruments

The method used in the data collection process is by:

2.2.1 Interview

In this case, the researcher conducted an interview with the resource person, namely Kang Irman Megantara as Chair of the Ngajimantara Karang Taruna, Sarijadi Subdistrict, with the aim of getting an overview of the operational management and IS/IT processes at Karang Taruna. The data that the researcher obtained from the interview results was put into table form as follows:

Table 1 Interview

No	Question	Answer
1	How to improve operational management at Karang Taruna Ngajomantara, Sarijadi Village?	We use Google Drive software to store existing data so that everyone can access the data. Not only correspondence, but activity documentation and other document files are stored in one Google Drive and not only stored on hardware.
2	Are there any deficiencies in operational management at Karang Taruna Ngajomantara, Sarijadi Subdistrict?	Yes, because not everyone can take advantage of the technological features currently available, such as schedule boards and taking minutes.
3	Is this influenced by Karang Taruna's human resources not taking advantage of or not understanding current technological developments?	The human resources at Karang Taruna themselves understand existing technological developments, but more importantly the human resources we have are not yet ready to accept/utilize existing technological developments.
4	What can be a solution regarding the operational management problems of Karang Taruna Ngajomantara, Sarijadi Subdistrict in the future?	Maybe in the future Karang Taruna itself will try, test first whether using existing technology will be more effective or not.
5	Does Karang Taruna Ngajomantara have an information system that is commonly used for organizational managerial needs and social services to the community?	Yes, we have a website that explains about the Karang Taruna Ngajomantara institution, Sarijadi Subdistrict, as for documentation about the activities that have been carried out by Karang Taruna, as well as for the management of social services, there is also on the website.
6	Who is in control or manages the website at Karang Taruna Ngajomantara?	The management of the information system or website at Karang Taruna is managed by the Communication, Information and Social Sector (KOMINSOS).
7	Apart from the systems/features on the website, what systems/features are needed on the website to improve operational management at Karang Taruna?	Some of the urgent things currently for Karang Taruna Ngajomantara, Sarijadi Village, are implementing the schedule board system/feature and document archiving. Apart from that, they need to do better development on their website. The aim is not only to show the organization's profile to the public, but also to enable the public to report their complaints or social needs.

No	Question	Answer
		<p>However, there needs to be more frequent reviews and updates on the website, such as adding features/systems that allow residents to easily contact Karang Taruna. Currently, even though there is a website and several complaints have been received, it is considered less effective because notifications are not immediately received by all Ngajomantara Youth Organization administrators. The hope is that if there is a complaint via the website, all administrators will receive notification from the website to improve social services to the people of Sarijadi Village.</p>
8	<p>If later this system/feature is on the Karang Taruna website, but there are administrators who don't care about complaints made by members of the public, what steps will be taken to overcome this problem?</p>	<p>At Karang Taruna Ngajomantara, there is a Human Resources Development (PSDM) sector which aims not only to improve the quality of members and administrators, but also to raise awareness and concern for complaints submitted to Karang Taruna. This persuasive approach is used to remind that complaints from members of the public must be followed up immediately.</p>
9	<p>What is the decision-making process at Karang Taruna Ngajomantara to improve operational management?</p>	<p>In the context of decision making at Karang Taruna Ngajomantara, there are several conditions or situations that influence the way decisions are made. If a situation is deemed urgent, the decision will be taken directly by the Chair or Deputy Chair. However, if the situation is urgent but does not require an immediate decision, then the decision will be made collectively involving all members of the management. This is because in Karang Taruna Ngajomantara, not only the Chairman or Deputy Chairman is responsible for managing the organization, but all members of the management are actively involved. Therefore, it is important to involve all members in decision making in order to achieve better results and represent a wider range of interests and perspectives.</p>
10	<p>Is there a method used in the decision-making process at Karang Taruna Ngajomantara?</p>	<p>In making decisions at Karang Taruna Ngajomantara, there are several methods that can be used including SWOT analysis to consider internal and external factors that influence decisions. They also prioritize issues that need to be resolved based on their urgency and impact. By combining SWOT analysis and importance assessment, Karang Taruna can make more comprehensive and informative decisions. This can help them identify the right solutions and optimize their organizational responsibilities.</p>
11	<p>If one day an information system for improving operational management at Karang Taruna Ngajomantara existed, what would your opinion be about the SWOT analysis?</p>	<ol style="list-style-type: none"> <li data-bbox="691 1368 1394 1608">a. Strength (strength) This system will be in line with the vision and mission of Karang Taruna, where the creation of Karang Taruna Ngajomantara, Sarijadi Subdistrict which is ASIK (Adaptive Prosperous, Innovative and Creative). Can adapt to technological developments, and can be innovative and creative in utilizing technological developments. <li data-bbox="691 1615 1394 1771">b. Weakness Not all Ngakomantara Youth Organization administrators are aware of technological developments, which has resulted in the administrators being unprepared to utilize technology well. <li data-bbox="691 1778 1394 1980">c. Opportunities This system can be more efficient, more easily reach social issues or problems faced by residents of the Sarijadi Subdistrict community, and can increase the sense of awareness, and the vision and mission of Karang Taruna Nganjomantara can be carried out. <li data-bbox="691 1986 1394 2011">d. Threats

No	Question	Answer
		There is still a tendency where the administrators are still not aware of the problems that are occurring, because the nature of the youth currently shows more individualism, which could be a threat to Karang Taruna.

2.2.2 Questionnaire

In this case, a questionnaire is used to obtain data related to the main research material and this questionnaire is used as a guide to reveal the objectives of this research. This questionnaire was given to all the management of Karang Taruna Ngajomantara which discusses operational management problems that exist in the Karang Taruna Ngajomantara organization, Sarijadi Subdistrict, Bandung City in particular.

2.2.3 Study of literature

This is used to find out more clearly the existing data which will later be used as comparison material in this research. The literature study table is as follows:

Table 2 Literature Study

No	Title	Year	Author	Method	Results
1	Operational Management	2019	Suryono Efendi, Djoko Politiknyo, Edi Sugiono		Operational management is a science that discusses a series of processes of planning, organizing, regulating and controlling various operational activities carried out by a company, including the activities of producing goods and services through the transportation of inputs into outputs. In order to increase the scientific knowledge in the field of operational management, a book was prepared.
2	Regulation of the Minister of Social Affairs of the Republic of Indonesia Number 25 of 2019 concerning Karang Taruna	2019			In the general provisions of PERMENSOS Number 25 of 2019, it is stated that Karang Taruna is an organization formed by the community as a forum for the young generation to develop themselves, grow and develop on the basis of awareness and social responsibility of, by and for the young generation, which is oriented towards achieving social welfare for society.
3	Karang Taruna's participation in community activities through social action	2020	Nandang Rukanda, Nurhayati, Ganda	Qualitative Approach	Increasing the effectiveness of social actions carried out by Karang Taruna, Cikole Village, Lembang District, West Bandung Regency, and also the impact of social actions carried out by Karang Taruna on community participation has changed significantly.
4	Analysis of External and	2019	R Achmad	Willya W, Qualitative Approach	Relawan Muda Riau was formed as a social service

No	Title	Year	Author	Method	Results
	Internal Factors of the Riau Young Volunteer Social Service Organization		Soni Akhmad Nulhaqim, Sri Sulastri		organization running according to its corridors, which focuses on assisting the government in overcoming social welfare problems. However, this organization experiences difficulties from external factors consisting of economic, sociological, political and technological factors, while internal factors consist of organizational goals, mission and philosophy, organizational planning, organizational operations, HR, SDT and funding.
5	Development of the Karang Taruna Social Services Web Application Using the CodeIgniter 4 Framework	2022	Azvyva Erstevan Imbaloputra	Cowboy Methodology	Sarijadi Village Karang Taruna Social Services Web Application, which can be used by the Sarijadi Village Karang Taruna, as well as the general public for the realization of social service activities.
6	The Effect of Implementing Management Control Systems and Organizational Culture on Managerial Performance	2019	Suci Widia Wahyuni, Rini Lestari	Empirical method with a verification and quantitative method approach	The implementation of a management control system affects managerial performance, this will improve the quality of managerial performance at Sharia Commercial Banks in Bandung City. Organizational culture also influences managerial performance, because it shows that the better the organizational culture, the quality of managerial work will improve.
7	Karang Taruna Agent for Community Change and Development in Pandeglang	2019	Suradi	Descriptive method with a qualitative approach.	Karang Taruna Sukajadi in Pandeglang is a social organization consisting of young people, who act as agents of change in developing society through various social, economic, arts and culture and community activities. The program that has been implemented provides attention and assistance to program recipients to fulfill basic needs such as adequate housing, food and education. However, there is a need to optimize the role and activities of Karang Taruna, which requires empowerment so that its programs and work results can be more effective. By suggesting that the central government of Padegleng

No	Title	Year	Author	Method	Results
					Regency provide a capacity building program and operational funding support for Karang Taruna.
8	Agricultural Development Model, Patterns of Interaction and Interdependence in Utilizing Socio-Economic Services in Serdang Begadai Regency	2020	Gustami Harahap, Fatmawaty	Qualitative approach	The pattern of interaction and interdependence has a value that has a real and positive influence on socio-economic service facilities, which has a significant influence on socio-economic service facilities.
9	IS/IT Strategic Planning Using Ward and Peppard Methodology (Case Study: Gallery Group)	2022	Indra Kristiawan, Augie David Manuputty	Qualitative approach and document study	In business processes, Gallery Group has implemented assistance from IS/IT, which has an impact on the company's performance costs. However, there are still many business processes that have not been carried out using IS/IT. Therefore, the use of analytical techniques, such as SWOT analysis and Porter's Five Forces, can determine the conditions of the business environment and IS/IT environment internally and externally. This McFarlan Strategic Grid analysis can help in producing an application portfolio that matches the description of IS/IT use in the company.
10	Ward and Peppard Method Approach for Strategic Planning of Information Systems at XYZ Training Institute	2021	Norlaila, Quratul Ain, Silvi Agustiani Bambang, Sukoco, Dhani Ariatmanto, Adrianto M. Wijaya	<i>Ward and Peppard</i>	Based on the results of analysis and observation, 18 proposals were produced, namely Information Service SI via WA Center, Information Service SI via email, Financial SI, HR SI, Evaluation and Reporting SI, Planning SI, online Institutional SI, online OJT Sisfo, online Complaints Application Society, Optimizing Websites and Landing Pages, online Alumni Applications, mobile web, IK Online Applications, and SI Archives.
11	Analysis of Value Chain Management in Micro, Small and Medium Enterprises in Indonesia	2020	Agustian Sesuno, Jauhari Arifin, Sutrisno	Descriptive qualitative method	This value chain strategy analysis can be used as a solution for MSMEs to direct them to have superior performance through analysis of the operational principles of effective supply chain management and strategic positioning that can win

No	Title	Year	Author	Method	Results
					market competition, so the supply chain must be able to provide young, high-quality products. timely, and varied. Also as capacity utilization through product/service differentiation, communicating superiority, distinctiveness, uniqueness, digitalization of business processes.
12	Competitive Strategy Analysis at Biznet Salatiga Branch Using Porter's Five Forces	2021	Septian Hintoro, Agustinus Fritz Wijaya	Qualitative and quantitative approach methods	The results of the Porter's Five Forces Model mapping at Biznet Branch Salatiga show that the threat of new entrants and the bargaining power of suppliers is quite low, the bargaining power of buyers, the threat of substitute products, and competition with similar competitors is quite high. By utilizing these five strengths, it is hoped that Biznet Salatiga will be able to increase its competitive advantage to compete in the internet service provider industry.

2.3 Research Phase

This research at Karang Taruna Ngajomantara, Sarijadi Village, used the Ward and Peppard methodology with a qualitative approach. There are several stages in this research process, these stages begin with conducting an interview with the Chair of the Ngajomantara Karang Taruna and a questionnaire with the Ngajomantara Karang Taruna Management, Sarijadi Village. The data that has been obtained will be analyzed using the Ward and Peppard method, which includes several analysis techniques, namely SWOT analysis and Value Chain analysis. This data collection was carried out so that researchers could analyze based on existing facts in Karang Taruna Ngajomantara so that later researchers could provide research results that were able to develop the operational management performance of the organization in Karang Taruna Ngajomantara, Sarijadi Village.

3. RESULTS AND DISCUSSION

Information system strategic planning in improving the operational management of the organization at Karang Taruna Ngajomantara, Sarijadi Village, Bandung City, there are several things that are problems or obstacles faced by Karang Taruna Ngajomantara, such as the lack of a system for the process of managing or archiving data/information, administrators or members. Karang Taruna does not take advantage of current technological developments, and also poor social services, due to a lack of concern from the management towards social issues or problems that occur in the community. Therefore, this research aims to improve resource management effectively and efficiently to achieve organizational goals and also to improve the quality of social services for the people of Sarijadi Village.

The method used in this research is the Ward and Peppard method with a qualitative approach. The data sources used for this research come from data collection techniques, namely interviews and questionnaires. The planning techniques used in this research are SWOT Analysis and Value Chain Analysis. The following explains the results of the research carried out by the author.

2.1 SWOT analysis

This SWOT analysis technique is carried out to analyze the strengths, weaknesses, opportunities and threats of the organization's internal and external environment [6]. The following are the results of the SWOT analysis of Karang Taruna Ngajomantara, Sarijadi Village.

Table 3 SWOT Analysis

Internal	Strength (strength [S])	Weakness (weakness [W])
	<ol style="list-style-type: none"> In line with the organization's vision and mission. Adaptable, innovative and creative. Management system and teamwork. Good organizational flow. Improving data management efficiently and effectively. 	<ol style="list-style-type: none"> Human resources' unpreparedness for technological developments. Lack of complete hardware.
External		
Opportunities (opportunities [O])	S+O Strategy	W+O Strategy
<ol style="list-style-type: none"> The vision and mission will be carried out. It is easier to reach social issues or problems. Can increase a sense of caring. Improved management performance. More efficient data management. HR becomes more productive. 	<ol style="list-style-type: none"> Increasing organizational innovation and creativity. Implement educational and social awareness programs. Building a more efficient management system. Strengthen data management and analysis. Increase the productivity and performance of organizational human resources. 	<ol style="list-style-type: none"> Utilizing the organization's vision and mission to reach social issues or problems. Increase the sense of care and performance of management. Develop technology training programs. Implement efficient data management strategies.
Threat (threat [T])	S+T strategy	W+T strategy
<ol style="list-style-type: none"> Tendencies related to concern for social issues or problems. HR knowledge of information systems or information technology. Limited internet access that can affect connectivity and availability of information systems. 	<ol style="list-style-type: none"> Building awareness and increasing a sense of concern for social issues or problems. Developing organizational HR training and development programs. Plan and allocate resources to overcome hardware limitations. Increase HR knowledge regarding information systems and information technology. Optimize data management efficiently and effectively. 	<ol style="list-style-type: none"> Increase HR knowledge and skills related to technology. Overcoming insufficient hardware equipment. Work with partnerships or technology consultants. Looking for alternative solutions to limited internet access.

2.2 Value Chain Analysis

This value chain analysis is used to identify primary activities and support activities in an organization or company, then analyze them to reduce costs, it is also used to analyze the organization's internal activities, and this analysis reveals where an organization's competitive advantages or disadvantages are [7]. The following are the results of the value chain analysis that has been carried out.

Table 4 Value Chain Analysis

Table 4 Value Chain Analysis					
Support Activities	Firm Infrastructure Strategic planning and risk management, development of policies and procedures				
	Human Resource Management Develop and ensure that human resources are productive and skilled and ready to face developments in information systems and information technology				
	Technology Development Microsoft Office, e-mail, and websites				
	Procurement Procurement with suppliers regarding hardware availability and limited internet access required, increasing HR knowledge about information systems and information technology				
Primary Activities	Develop a more efficient data management system to obtain and integrate necessary resources, and ensure incoming information is accurate and timely	Operational activity processes in accordance with the organization's vision and mission that can be adaptable, innovative and creative to optimize data and increase operational efficiency and effectiveness	Can reach and increase awareness of social issues or problems better, and improve management performance in organizational management. The organization's vision and mission become the basis for publicizing the organization's adaptability, innovation and creativity to the community.	The organization's vision and mission become the basis for publicizing the organization's adaptive, innovative and creative excellence to the community	Improving data management to provide efficient social services, ensuring skilled human resources in managing information systems and information technology to provide quality social services, as well as overcoming limitations in internet access and optimal availability of information systems
	Inbound logistics	Operations	Outbound logistics	Marketing & sales	Service

2.3 Porter's Five Forces analysis

Analysis is used to determine the level of competition and market attractiveness in an industry. By using this analysis we can understand the strength of current competition and the strength of business competition that is being and will be planned [8]. This analysis is also used to analyze the external environment of an organization or company and provide an overview of competitors' business competition [5]. The following are the results of Porter's five forces analysis at Karang Taruna Ngajomantara, Sarijadi Village.

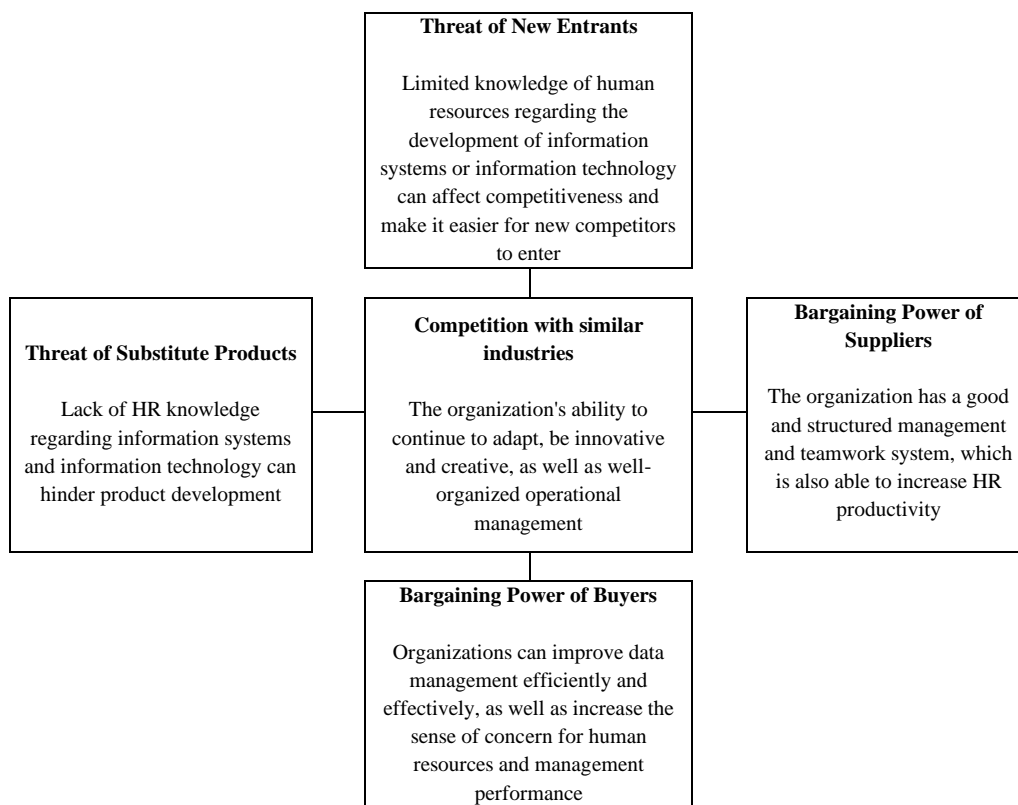


Figure 1 Five Force Analysis

4. CONCLUSION

In Karang Taruna Ngajomantara, Sarijadi Village, this research aims to determine the significance of information system strategic planning in enhancing organizational operational management based on the findings of previous investigations. This research demonstrates, via the process of analysis and data collecting, that Karang Taruna Ngajomantara can reap substantial benefits from the adoption of effective information system strategic planning. Better data management, higher-quality social services, higher productivity in management performance, and the ability to be inventive and creative in responding to advancements in information technology and current information systems are some of these advantages or positive effects.

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