**STRATEGY SELECTION IN THE IMPLEMENTATION OF PT KERETA COMMUTER INDONESIA'S SECURITY MANAGEMENT SYSTEM IN THE GREATER JAKARTA AREA**

Mohammad Ridwan1, Zainur Hidayah2, Amir Tengku Ramly3

1Security Departement, Hse and Security Division, PT Kereta Commuter Indonesia

1Program Studi Manajemen SDM, Fakultas Ekonomi, Universitas Terbuka

2Universitas Terbuka, Jl. Pd. Cabe Raya, Pd. Cabe Udik, Kota Tangerang Selatan, Indonesia

3Universitas Ibn Khaldun Bogor, Jl. Sholeh Iskandar, Kota Bogor, Indonesia

Email: mohammad.ridwan@krl.co.id

***The purpose of this study is to describe a general description of the conditions of Security Management System (SMS) implementation in the PT KCI Greater Jakarta area, examine indicators that can affect the implementation of SMS at PT KCI Greater Jakarta area, and formulate a priority scale strategy for SMS at PT KCI Greater Jakarta area during the COVID-19 pandemic. The researcher uses Analytical Hierarchy Process (AHP) method by including six indicators of field certification, employee skills training, reporting & administration, archive documentation, and performance evaluation as the selection of indicators that affect implementation, and three alternative selection strategies, namely training competencies, documentation & records, and controls & processes. The results showed that the most influential indicators were the Documentation Archive 0.331, Reporting & Administration 0.223, and Operational Control 0.203, while the appropriate alternative strategies to determine steps in implementing SMS during the covid-19 pandemic were Documentation & Records 0.594 and control and process 0.262. The results imply that to achieve the successful implementation of the SMS program at PT KCI, a document filing system and good operational control are needed in each security unit.***

**Keywords:** Security Management, Analytical Hierarchy Process, Transportation Management, Commmuter Train, Indonesia

**Article info**

Article history:

Received 22 December 2019

Received in revised form 19 June 2020

Accepted 2 July 2020

Available online 27 July 2020

Ridwan, M., Hidayah, Z., & Ramly, A.T. (2022). Strategy Selection in the Implementation of PT Kereta Commuter Indonesia's Security Management System in The Greater Jakarta Area. *Journal Ilmiah Manajemen dan Bisnis, x* (x), xx-xx.

**INTRODUCTION**

The transportation sector is a sector that is very vital for the interests of the state, both from an economic point of view and from a social, political, government, defense, and security perspective. The transportation sector is utilized by the majority of the population, especially those living in urban areas. In the Greater Jakarta area (Jakarta, Bogor, Depok, Tangerang, and Bekasi), transportation users in 2019 have reached almost one million people (BPS, 2019).

PT Kereta Commuter Indonesia (PT KCI) is a mass transportation provider company. PT KCI has several KRL users per day, reaching more than one million passengers served at 80 stations spread across the Greater Jakarta area and the Banten and Cikarang areas having more than 900 KRL series that operate in a day trip. The high number of KRL users shows that the KRL mode of transportation is still a reliable transportation choice for the community in the mobility of daily activities. Besides that, PT KCI is a mass transportation service company with strategic or vital objects directly related to many people's needs.

Based on data from the report on security and order disturbances (Kamtib) of PT KCI, especially the Greater Jakarta area during the 2019-2020 period, there have been 556 cases of security and order disturbances, with the highest cases being cases of theft/pickpocketing, bullying, throwing, sexual harassment, traffickers/beggars, and vandalism.

In addition, related to the passenger's safety and security on the train, PT KCI also has 5 (five) Building Assets in the Greater Jakarta area, namely 1 (one) Head Office, 3 (three) KRL Depots, and 1 (one) Balaiyasa. Sennewald & Baillie (2016) stated that companies or organizations' obligation, especially in the security system, is to provide roles and protection for company assets, equipment, reputation, and employees. Therefore, PT KCI is required to implement a security management system (SMS). Cahyono (2011) argued that security system management is necessary and must exist in company management's development and operational activities to prevent various forms of security disturbances.

In August 2019, PT KCI started the initial stages of establishing a security management system. The implementation of this SMS is carried out based on government and company policies. Because the implementation of this SMS is only in the early stages, a strategy is still needed to determine the selection of a priority scale to achieve the company's goals and objectives. According to Cabric (2015), companies that implement a security management system can explore and advance the company's competence for the better, of course, by identifying, understanding, evaluating, anticipating forms of risk from threats, and designing strategies in their implementation. Without a good strategic plan to implement SMS, companies or organizations will undoubtedly experience difficulties in facing future challenges related to the security and safety of companies and the increasingly complex transportation user community (Sennewald & Baillie, 2016).

Since the Corona Virus Disease 2019 (Covid-19) pandemic that hit Indonesia in March 2020, various policies in Indonesia have also changed. Therefore, all sectors are also required to maintain and regulate new habit patterns for the community to be more disciplined for awareness of health protocols that have been established and made by the government. In addition, as a form of effort to prevent and transmit Covid-19 in the community (Loske, 2020), of course, government policies in the transportation sector have also changed. In response to this pandemic situation, PT KCI also made changes in implementing its management system, especially in the security sector. The risk of transmission of Covid-19 virus infection, especially in the railway sector, is substantial and needs to be watched. Therefore, the role of company management in the security sector needs to be increased so that it becomes a particular concern to maintain the continuity of the company's operations for exemplary service to the community and following the recommendations. Health protocols are recommended and implemented by the government.

This study examines the security management system at PT KCI in the Greater Jakarta area to formulate a strategy for implementing the security management system during the Covid-19 pandemic.

**LITERATURE REVIEW**

***The Concept and Importance of a Security Management System***

The security management system in the transportation sector is an important and vital aspect to support the economy and improve the quality of life for its users and society in general (Hillsborough, 2012). According to Barrick (2014), security management systems enable companies to organize and manage security and respond to security challenges that occur during the company's operations. Security management systems guide how to manage threats and disruptions to organizations to achieve a safe, productive, and efficient organization and provide the necessary layers of protection to control all existing risks (Maritime Transportation System, 2005). The systems begin with planning, implementing, and controlling the activities and work efforts of members/employees of an organization through using organizational resources to achieve a predetermined goal. The management theory used in this study is modern management under the relationship with the existing work procedures in the police. This theory discusses from top to bottom level or top management to workers and focuses on the human element (role) to improve overall performance.

Polri (2007) Article 5 defines that there are 16 (sixteen) elements contained in the standards and application of security management systems in organizations, companies, and government agencies/institutions, consisting of among others: 1). Commitment Maintenance and Building; 2). Fulfillment of Aspects of Security Act; 3). Security Risk Management; 4). Goals and Goals; 5). Planning and Program; 6). Security Training, Awareness, and Competence; 7). Consultation, Communication, and Participation; 8). Control of Documents and Records; 9). Emergency Management; 10). Process and Infrastructure Control; 11). Performance Monitoring and Measurement; 12). Reporting, Correcting and Preventing Nonconformities; 13). Data Collection and Use; 14). Audit; 15). Management Review; 16). Continuous Improvement.

**METHOD**

***Data***

This study used primary data collected through questionnaires and in-depth interviews with informants. The sample in this study is 11 respondents. The samples in this study are experts in the transportation system and understand implementing SMS, as follows:

1. Vice President of PT KCI's Security and Safety Unit

2. Security and Safety Manager of PT KCI Station

3. Security and Safety Manager on the train of PT KCI

4. Junior Manager for Supervising and Controlling the security and safety of PT KCI Station

5. Junior Manager for Supervising and Controlling the security and safety on the train of PT KCI

6. Assistant Manager for Planning and Evaluating the security and safety of PT KCI Station

7. Assistant Manager for Planning and Evaluating the security and safety on the train of PT KCI

8. PT KCI Security Supervisor

9. PT KCI's Junior Security Supervisor

10. PT KCI Security Staff

11. External Officials / PT KCI Partners

We conducted in-depth interviews with officials at PT KCI, namely the Vice President of the Security and Safety Unit of PT KCI, who has great authority in making decisions in the security and safety unit of PT KCI. Leaders must be able to make decisions in various existing situations by choosing the best among some alternative decisions they face. In addition, leaders must have the capability to explain the reasons for choosing an alternative decision in the most easily understood way to get support in its implementation. We also interviewed security experts in the transportation sector, namely the President Director of One Company Partner at PT KCI.

***Analysis Method***

This study uses the Analytical Hierarchy Process (AHP) to determine the implementation priority scale for implementing the security management system at PT. KCI using Expert Choice 11 application. Effendi (2007) said that the notion of AHP itself is a comprehensive and beneficial method and can integrate qualitative and quantitative factors in the decision-making process. The Analytic Hierarchy Process (AHP) is a multi-criteria decision making with the support of a methodology that has been recognized and accepted as a priority which in theory can provide different answers to decision-making problems and rank alternative solutions (Kazibudzki, 2013).

The AHP method, developed by Thomas L. Saaty, is a framework for making effective decisions on complex problems by simplifying and accelerating the decision-making process by solving the problem into its parts, arranging parts or variables in a hierarchical arrangement, assigning a numerical value to subjective judgments about the importance of each variable and synthesizing various variables. These steps determine which variable has the highest priority and could influence the outcome in that situation.

In solving problems using the AHP method, there are several basic principles of the AHP method that must be understood, namely as follows (Saaty, 1994):

1. Decomposition (principle of compiling a hierarchy).

2. Synthesis of Priority (preparation and determination of priorities).

3. Logical Consistency (principle of logical consistency).

The decomposition principle hierarchically describes the problem and then breaks the problem into separate elements. The AHP method breaks down these elements until it is impossible to do further solving to obtain several levels to provide more accurate results.

We measure the consistency in the AHP model in two stages. First, we measure the consistency of each comparison matrix and then measure the consistency of the entire hierarchy.

The consistency index (CI) formula is as follows (Alonso & Lamata, 2006):

$$CI=\frac{ λmaks – n}{ n-1}$$

Note:

$λ$maks = maximum *eigenvalue*

 n = matrix size

CI = consistency index

To calculate the consistency ration (CR) formula is as follows (Alonso & Lamata, 2006):

$$CR=CI/RI$$

Note:

$CI$ = Consistency index

RI = random index value

CR = Consistency ratio

If CI is zero, it means the matrix is consistent. The inconsistent limit is measured using a random generator value (R1). Based on calculations using 500 samples, if numerical considerations are taken randomly from a scale of 1/9, 1/8,…,..1,2…..,9, the average value of consistency for matrices with different sizes is obtained as shown in Table 1.

**Table 1**. Random Index Value (RI)

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| OM | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| RI | 0 | 0 | 0,58 | 0,90 | 1,12 | 1,24 | 1,32 | 1,41 | 1,45 | 1,58 |

Source: Saaty (1994)

 Note: OM = Matrix orde, RI = Random Index

 In the second stage, we measure the consistency of the entire hierarchy. The formula is as follow:

Note:

$$CRH=M/\overbar{M}$$

$M$ = CI level 2 + Weight priority level 2 \* C1 level 3

$\overbar{M}$ = RI level 2 + Weight priority level 2 \* RI level 3

RI = Random Index

We can accept the results of the overall hierarchy assessment if it has a consistency ratio (CRH) of less than 10%.

**RESULTS AND DISCUSSION**

The analysis using the AHP method shows that to achieve success in implementing SMS at PT KCI, we need strategic steps to determine the priority scale for selecting indicators and alternative strategies and elements in the SMS implementation component. It is in line with the results of Arlian's research (2015) that we must select the best option to

 find out the desired results. Ramly (2013) also stated that knowing the indicators and criteria that affect the implementation is an excellent way to achieve the best performance in management. Furthermore, from the results of this study, an assessment of the priority scale of SMS implementation at PT KCI was obtained in the form of indicator assessment, alternative strategy assessment, and element assessment of 3 (three) alternative selection strategies can be seen in the AHP level arrangement in Figure 1 as follows:

**Figure 1. Indicator and Alternative Strategy Priority in The Implementation of Security and Safety Management in PT. KCI**

SMS Implementation at

PT.KCI

(1,000)

Documentation

Report & Administration

Employee Skills Training

Field Sertification

Performance Evaluation

Operational Control

Control & Process

Archive Documentation

Competency Training

**INDICATORS**

**ALT STRATEGY**

**S**

**GOALS**

(0.048)

(0.064)

(0.223)

(0.331)

(0.203)

(0.130)

(0.144)

(0.594)

(0.262)

The results of the analysis of the AHP method show that the Documentation Archive is the indicator with the highest priority value with a score of 0.331. The reporting & administration indicator and operational control scores are 0.223 and 0.203, respectively. In line with the assessment of indicators, the assessment results of alternative strategies also show that documentation and records have the highest score compared to other alternatives, which is 0.594. It is pretty reasonable considering the requirements for documentation archives are the main requirements in carrying out SMS implementation activities. Sennewald & Baillie (2016) reveal that SMS has a vital role in achieving organizational success in a well-managed organization. Data plays a role in various aspects of the organization, starting from the budgeting process, recording incidents related to crime and security, risk analysis data, and monitoring and evaluation purposes. Furthermore, in an organization, the people who play a role in it can change, but a function will continue to be attached so that with good documents and administration, the organization's functions can continue to run. In implementing the SMS at PT KCI, companies must collect essential documents such as audit documents from the financial audit supervisory agency (BPK) and internal supervisory unit audits (SPI), company security reporting documents, and all documents related to security performance reporting activities.

***Analysis of Alternative Strategy Elements***

Based on the results of the element assessment of the alternative documentation and records strategy, it shows that the strategy in carrying out documentation and records activities in the security management system is best when recording is carried out regularly in a shorter period, namely monthly. The longer the recording period, the lower the score for alternative documentation and recording strategies (Table 2).

**Table 2.** Element Strategy Score of Documentation and Record Strategy

|  |  |  |
| --- | --- | --- |
| **Alternative Strategy** | **Element Strategy** | **Priority Score** |
| **Documentation & Record** | **Report every 1 month** | 0.581 |
| **Report every 3 month** | 0.252 |
| **Report every semester** | 0.114 |
| **Report every year** | 0.055 |

*Source: raw data from March-Mayi 2021, processed by author*

Based on the assessment results of the elements of the alternative Control and Process strategy in Table 3, the highest result is through the Protection activity with a score of 0.519, followed by evaluation, review, and monitoring activities with a score of 0.231, 0.164, and 0.087.

**Table 3.** Element Strategy Score of Controling and Processing

|  |  |  |
| --- | --- | --- |
| **Alternative Strategy** | **Element Strategy** | **Priority Score** |
| **Controling and Processing** | **Protection** | 0.519 |
| **Monitoring** | 0.087 |
| **Review** | 0.164 |
| **Evaluation** | 0.231 |

*Source: raw data from March-Mayi 2021, processed by author*

Three elements in the competency training strategy that determine the assessment process consist of Alternative Competency Training Strategy, Documentation & Records Strategy, and Control & Process Strategy. Based on the results of the assessment of alternative elements of strategies for competency training in Table 4 shows that the highest element of strategy in competency training is through coaching activities with a score of 0.444, while the minor result is through a workshop implementation strategy with a score of only 0.292 (see Table 4).

**Table 4.** Element Strategy Score of Competency Training

|  |  |  |
| --- | --- | --- |
| **Alternative Strategy** | **Element Strategy** | **Priority Score** |
| **Competency Training** | **Coaching** | 0.444 |
| **Education** | 0.292 |
| **Workshop** | 0.067 |
| **Certification** | 0.197 |

*Source: raw data from March-Mayi 2021, processed by author*

***Analysis of Interview Results***

Slightly different from the assessment results using the AHP method, based on information obtained from in-depth interviews with selected resource persons, the priority indicator under current needs in implementing SMS is operational control. It is related to the following questions: "*In this covid-19 pandemic, what things should be a priority in implementing SMS at PT KCI?* "

Mr. Made Gerina Yasa, the head of the Security and Safety unit of PT KCI, stated, "*I think that during the covid-19 pandemic, control is the key to the success of operational implementation and has become a mandatory thing to run. In addition, we also have the concern to limiting the number of passenger quotas on the train and stations, following the government's rule. It is also a concern of PT KCI's security unit to take appropriate strategic steps so the SMS implementation could be in line with existing conditions*”.

Furthermore, according to another point of view from an external party with the following questions: "*In connection with the Covid-19 pandemic, what should be the priority in implementing SMS at PT KCI?* "

Mr. Imam Fatoni Effendi, a security expert in the transportation sector as well as the President Director of PT Bima Bangun Sentana, said, "*In my opinion during the Covid-19 pandemic, PT KCI has faced many challenges. First, we need to ensure the consistency of limiting passenger volume, checking passengers with body temperature, and then checking all KCI staff to wear masks. We also ensure there is insulation in the area outside the station, which can lead to the crowdedness of people. Therefore, the most appropriate priority during the COVID-19 pandemic in SMS implementation is the use of operational control followed by selecting alternative strategies, namely control & process "*.

It is in line with the results of research in China conducted by Shi, et al. (2020), which explains that operational control is indispensable and needed to improve public safety in public transportation as a form of prevention and control of the spread of COVID-19 disease. We need to conduct the operational control through strengthening personnel management, personal protection, environmental cleaning and disinfection, and health education through outreach activities. We also need to increase the security of transportation personnel by equipping officers with complete attributes such as masks, gloves, long sleeves. We must clean all of the officers' equipment using disinfectant liquid. Chung (2015) stated that effective operational control could minimize the economic impact of the COVID-19 pandemic at airports. Therefore, simplifying operational control is crucial as a strategic step to reduce the enormous economic impact on the transportation sector.

**CONCLUSION AND RECOMMENDATION**

***Conclusion***

 Based on the study results, the condition of the implementation of the security management system (SMS) at PT KCI, especially in the Greater Jakarta area, is currently generally running well. The implementation of security management system includes security mapping activities by work area, division of security assignments, preparation of organizational structure, assignment of security implementation, and regulation of security activities during the Covid-19 pandemic. The results of the AHP show that there are 3 (three) indicators that have an important influence on the SMS implementation, namely Documentation Archives, Reporting & Administration, and Operational Control. Further, analysis results find that the right alternative strategy to determine the steps in the SMS implementation is Documentation & Notes. On the other hand, in-depth interviews' results show that control and processes also have a very important role, especially during the COVID-19 pandemic.

***Recommendation***

  Based on the research results, we can propose at least three recommendations. First, PT KCI needs to provide a special storage repository (database) for documentation activities and forms of reporting to support the running of the SMS implementation process. Second, PT KCI also needs to form a special organizational unit that consists of several employees from different units and has a role or position that has an important influence on the unit. It is important to make the security process more effective and focus on company security issues. It is also on cooperative relationships in communicating more optimally, so that collaboration between company units in fulfilling the implementation of SMS implementation can be carried out for the company's achievement to realize the company's Mission & Vision. Third, for further research, it is recommended to use quantitative methods to find out and measure the level of success in implementing the security management system at PT KCI.

**REFERENCES**

Alonso, J dan Lamata T. 2006*. “*Consistency In The Analytic Hierarchy Process: A New Approach” *International* *Journal Of Uncertainty, Fuzziness And Knowledge – Based Systems Volume* 14 *(page 445-459)*. Singapore: World Scientific.

Arlian, Ujang. 2015. Analisis Tingkat Kepuasan Nasabah Bank Dengan Menggunakan Metode Analytical Hierarchy Process (AHP). Jakarta: Program Pascasarjana Universitas Terbuka.

Barrick. 2014. *Security Management System*. Canada: Barrick Gold Corporation.

BPS. 2019. “Statistik Kriminal 2019”, https://www.bps.go.id/publication/2019 /12/12/66c0114edb

7517a33063871f/statistik-kriminal-2019, diakses pada 10 Desember 2019 pukul 12.10.

Cahyono, Adi B. 2011. *Manajemen Sistim Keamanan Di Kawasan Industri Modern Cikande Serang.* Jakarta: Program Studi Kajian Ilmu Kepolisian Universitas Indonesia

Cabric, Marko. 2015. Corporate Security Management Challenges, Risks, and Strategies. United Kingdom: Butterworth-Heinemann is an imprint of Elsevier.

Chung, L H. 2015. “Impact of pandemic control over airport economics: Reconciling public health with airport business through a streamlined approach in pandemic control*”* *International* *Journal of Air Transport Management Volume 44-45 (page 42-53).* Amsterdam*:* Elsevier*.*

Flippo, Edwin B. 1976. *Principles of personnel management.* New York: McGraw-Hill.

Hillsborough. 2012. *Hillsborough County 2035 Long Range Transportation Plan*. Florida: Hillsborough County.

Kazibudzki, Pawel. 2013. “On Some Discoveries in the Field of Scientific Methods for Management within the Concept of Analytic Hierarchy Process” *International Journal of Business and Management; Vol. 8* (Page 8). Richmond Hill: The Canadian Center of Science and Education (CCSE)

Maritime Transportation System. 2005. “*The National Strategy For Maritime Security”*, https://www.dhs.gov/sites/default/files/publications/HSPD\_MTSSPlan\_0.pdf, diakses pada 20 Januari 2021 pukul 09.00.

Loske, Dominic. 2020. The impact of COVID-19 on transport volume and freight capacity dynamics: An empirical analysis in German food retail logistics. Germany: FOM University of Applied Sciences

Polisi Republik Indonesia. 2007. Perkap nomor 24 tahun 2007 tentang sistem manajemen pengamanan organisasi, perusahaan dan/atau instansi/lembaga pemerintah. Mabes Polri. Indonesia

Ramly, Amir T. 2013. Pengembangan Strategi Peningkatan Kinerja Guru Besar Institut Pertanian Bogor (IPB). Bogor: Sekolah Pascasarjana Institut Pertanian Bogor.

Rivai, Veithzal. 2005. *Manajemen Sumber Daya Manusia Untuk Perusahaan Dari teori Ke Praktik. Jakarta:* PT. Raja Grafindo Persada

Saaty. 1994. *Analytical Hierarchy Process, Proses Hierarky Analisis*. Bandung: Alfabeta

Sennewald, dan Baillie. 2016. *Effective Security Management, Sixth Edition*. United Kingdom: Butterworth-Heinemann is an imprint of Elsevier.

Stoner, James A.F. Dkk. 1986. *Manajemen*. Jakarta: CV Intermedia.

Shi. 2020. *Prevention and control of COVID-19 in public transportation:Experience from China.* China: China CDC Key Laboratory of Environment and Population Health, National Institute of Environmental Health.