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# The Use of Information Technology in Correctional Services to Improve Service Quality and Service Satisfaction: A Theory Approach

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## ABSTRACT

This study aims to see the use of information technology in correctional services in order to improve service quality and job satisfaction of employees at the Directorate General of Corrections, Ministry of Law and Human Rights of the Republic of Indonesia. This research is descriptive and narrative research by exploring previous research related to the use of information technology, training development, service quality and job satisfaction compiled with data on findings in the field. The results show that the use of information technology is carried out to speed up service processes, transparency and service accountability. To achieve quality services, the development of training for employees in the use of information technology has an important role, this is in addition to being able to encourage employees to improve service quality, it also has an impact on the level of job satisfaction of these employees. This study adds to the limitations of the literature and provides empirical evidence related to the use of information technology in the correctional sector which contributes to the service quality and service satisfaction at the Directorate General of Corrections.

**Keywords:** Information Technology, Service Quality, Job Satisfaction, Training, Quality Job, Broadband Access, Covid-19

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## INTRODUCTION

The use of information technology is currently a necessity in working, both in private and government organizations. People and organizations are required to adapt to existing technological developments and to use them in at work. The use of information technology has also penetrated the Correctional Institution.

Some studies have put their focus on this area, a study by Senanayake et al. (2018) which examined the use of telemedicine, namely consultation and health examinations of prisoners through visual media between prisoners and doctors in different places. This research shows efficiency in terms of time and safety for the prisoners and the doctors themselves. Similar studies were conducted by Young & Patel (2014) who examined telemedicine in the USA related to prisoners with HIV disease and Gualano, et.al (2016) with the same focus but more to the practice of telemedicine in European Union prisons. Another use of technology related to prisoners is the facility of video links from prisons that are connected to the courtroom showing positive results from a security perspective (McKay, 2015). Some other studies have put their attention on the use of video calls during visits in the USA (Tartaro, et.al, 2017, McLeod, et. al, 2018, Martin, 2016).

The current use of information technology in the correctional sector has seen its benefits especially during the Covid-19 Pandemic. In Indonesia, to avoid the spread of Covid-19, physical visiting services have been changed to virtual visiting services via video calls, trials are conducted via video conferencing facilities and several office activities are conducted virtually through the zoom application. This is not only done in Indonesia but also by many countries in the world, such as Australia, America and European countries.

According to Castellacci & Tveito (2018) who examine internet use on job satisfaction, the use of information technology has shown several results, first, it provides opportunities for users to access data and information like never before. Second, internet technology has also led to the emergence of new activities and services, as well as the emergence of new jobs as new opportunities for skilled workers. Third, the use of Internet leads to a time-saving effect, allowing employees to perform time-consuming and repetitive tasks in a more efficient manner than before. Finally, the Internet enables long-distance communication among workers through a variety of inexpensive yet powerful tools, which provide unprecedented opportunities for internal communication, and facilitate the flow of information between managers and employees.

The use of information technology requires employees to quickly adapt to the technology, and this of course will have different effects on employees. Some employees will perceive them as opportunities and are more likely to use them as active working tools to improve performance and job satisfaction (Bala & Venkatesh, 2016). However, there are also those who need time to adapt in the workplace trying to understand and manage these changes (Beaudry & Pinsonneault, 2005).

This condition indicates that when an organization decides to use information technology to improve its performance, the human resource factor becomes an important element to develop. Apart from being obtained through the recruitment process, the development of training for existing employees is expected to be able to improve employee competence in the use of information technology, especially for those who are in direct contact with information technology-based services. Training development is also a form of organizational investment that is expected to serve organizational goals (Wick: 2020).

This phenomenon is interesting to discuss further, especially in the current conditions of the Covid-19 Pandemic where there are challenges related to information technology itself and the readiness of human resources who carry it out. Research related to the use of information technology specifically in correctional institutions is still scarce, especially in the field of Human Resource Management, so this research is expected to be the first step for subsequent studies.

## LITERATURE REVIEW

Technology-based service in Correctional institution is expected to be as fast as ordering online travel tickets, where the travel data, the payment process, and the e-ticket are available within minutes. This need is not only to provide speed of service but also to support the main duties and functions of the correctional facility itself. Castellacci & Tveito (2018) in their research state that internet use, as an element in information technology, has four different types of effects on workers' welfare. First, it provides users with unprecedented opportunities to access data and information. Second, it leads to the emergence of new activities and services, and hence to the emergence of new jobs. Third, it leads to a time-saving effect, allowing employees to perform time-consuming and repetitive tasks in a more efficient manner than before. Finally, it enables long-distance communication between workers through a variety of inexpensive and powerful tools, which provide unprecedented opportunities for internal communication, and facilitate the flow of information between managers and employees. As technology users in organizations, employees need to be prepared, trained and developed for their competencies related to information technology. Employee training and development is a factor that encourages the achievement of employee competencies. Training and development are needed to survive in a dynamic business environment where new challenges are coming all the time (Pati & Das, 2018). Therefore, organizations need to continue to work on different strategies to stay in the market and provide the best possible service to potential target customers. Moreover, this is only possible if the employees are well trained and improve their skills and work in their line of work. In order to achieve competitive advantage and best results, organizations must upgrade employees' skills so that they can do their best at their jobs (Aguenza & Som, 2018).

The company needs to identify the needs of the organization so that the company can implement the type of training and development program that will be provided to individuals in the organization. Matching organizational needs and tasks with employee training and development programs will support employee competency improvement. Adjustment to the work environment, aligning one's abilities with technological developments and regulatory developments in the business world are the targets of employee training and development, so that employees are competent in carrying out their duties. It is hoped that by opening up training and development opportunities for employees, employee satisfaction at work will also increase. Regarding the importance of this training, Joice and Wang's (2015) research on doctors in Australia, conclude that to increase job satisfaction, it is necessary to have medical personnel who attended training from abroad, provided sustainable professional development and provided good health care for doctors.

## PROPOSITION

This study conceptualizes the use of Information Technology in improving the quality of correctional services, developing training and employee satisfaction in providing services. Due to the limited literature on the use of Correctional-related information technology with regard to research objectives, this study refers to previous research in several organizations / companies. The following sections describe the relationship between each of the variables in explaining the use of Information Technology, service quality, training development and satisfaction.

### Impact of Information Technology Utilization on Correctional Service Quality and Job Satisfaction

The relationship between the use of information technology and service quality is based on Theory of Reasoned Action (TRA) which states that someone will use information technology if the technology is useful and can improve the person's performance. Besides, it is also based on the Technology Acceptance Model (TAM) which states that the use of information technology can improve performance. While performance by Sutrisno (2016) is defined as a person's success in carrying out a task, the work results that can be achieved by a person or group of people in an organization according to their respective responsibilities and authorities or about how someone is expected to function and behave in accordance with the task at hand. has been charged to him and the quantity, quality and time spent in carrying out the task. So, it can be said that the use of information technology in an organization will improve the quality of individual services in carrying out their daily tasks. Utilization of information technology is expected to be a factor that influences the achievement of the service quality of these individuals in carrying out their duties within the organization.

When employees have carried out their duties properly which has a positive impact on the services provided, it is assumed that the employees concerned are satisfied with their work. Given that employees are the most important asset in the company, it is important for companies to maintain employee motivation and job satisfaction. Employees who feel happy at work will have a positive impact, while on the other hand, employees who are dissatisfied can actually boomerang for the company. In terms of job satisfaction, the 2015 SHRM study showed 88% of employees in America reported that they were satisfied with their work as a whole. 37% reported they were very satisfied and 51% reported they were somewhat satisfied. This study shows the highest level of satisfaction over the last 10 years. However, most employees are satisfied only to a certain extent, which indicates the possibility for improvement (Lee, 2016).

Wagner (1994) states that employee job satisfaction can be measured by attitude, performance, turnover rate, absence, complaints, and timeliness.

Based on the description of the relationship between the use of information technology and service quality and job satisfaction, the hypotheses developed in this study are:

*Proposition 1; The use of Information Technology affects the quality of correctional services and job satisfaction*

### Impact of Information Technology Utilization on Training Development and Service Quality

The use of information technology in training development makes training more effective and efficient. Training can be done in class or remotely (online training), moreover the training held is related to the use of information technology in the organization concerned. Kiruja and Mukuru (2018) state that employees who have attended training are more satisfied than employees who are not trained. Employees participate in training and development programs, get the opportunity to enhance their current talents and then be able to complete new skills that may be needed in the future. In the midst of a training and development session, employees understand their core competencies and which side they are doing admirably. In addition, employees also understand the lack of underperformance.

The development of training has made employees understand and have additional skills in carrying out their main duties and functions. Employees become confident in their work and have an impact on the quality of work related to information technology services. Barney (2001) states that technological capabilities also allow companies to use resources to generate competitive advantage. Technological capability is considered as a dynamic ability possessed by a company to better adapt to technological opportunities (Teece, 2007) and therefore is positively related to organizational effectiveness.

Given the findings described, the hypotheses developed in the study are:

*Proposition 2: The use of Information Technology affects the training development and service quality.*

### The Impact of Information Technology Utilization on Training Development and Job Satisfaction

The use of information technology for correctional services requires the ability of resilience through the availability of competent human resources in the field of Information Technology, whether obtained through recruitment or training. HR decisions play an important role in the development of organizational capabilities. HR systems generate organizational capabilities through the integration of a specific set of Human Resources Practices (HRP) such as training, promotion and compensation. (Saa-Perez & Garcia-Falcon, 2002).

To improve the analysis of organizational results, Jiang et al. (2012) grouped HRP into three different bundles (one bundle that increased workers' abilities, the second increased motivation and the third generated opportunities to participate). Through developing these practices, companies can configure HR systems as strategic tools to achieve organizational goals. Since HRP can contribute to the creation of organizational capabilities and HRP-specific bundles directly affect performance, it can be argued that HRP can enhance specific capabilities related to organizational resilience and, at the same time, HRP-specific bundles related to performance (Bello-Pintado, 2015). The relationship between resilience and organizational capability has been analyzed (Jüttner & Maklan, 2011), and work identifies the need for future research on the model to empirically test if these concepts are related (Powley, 2009).

In creating the ability to deal with this uncertainty, organizational ability is associated with superior performance (Collins & Smith, 2006; Gambardella, Panico, & Valentini, 2015; Guest, 1997; Heywood, Siebert, & Wei, 2010; Nabi, 2001), and Thus, resilience capability, as one of the organizational capabilities, is expected to be positively related to organizational effectiveness, especially in improving service quality. Through the training and development programs that are held, in the end employees feel satisfied that they are valued by the organization and the organization puts resources into it. All of these variables encourage fulfillment to result in greatly improved employee performance. when employees are satisfied, and they realize that their organization is spending a lot of money on training and development programs, as a result they want to return to the organization showing them their improved performance. Happy employees are employees who are performing well.

Given the findings described, the hypotheses developed in the study are:

*Proposition 3: The use of Information Technology affects the training development and job satisfaction.*

Based on the literature discussed above, the variables proposed in this study that determine employee job satisfaction both directly and indirectly include the use of information technology, training development and service quality. Figure (1) shows the relationship between each of the proposed constructs.

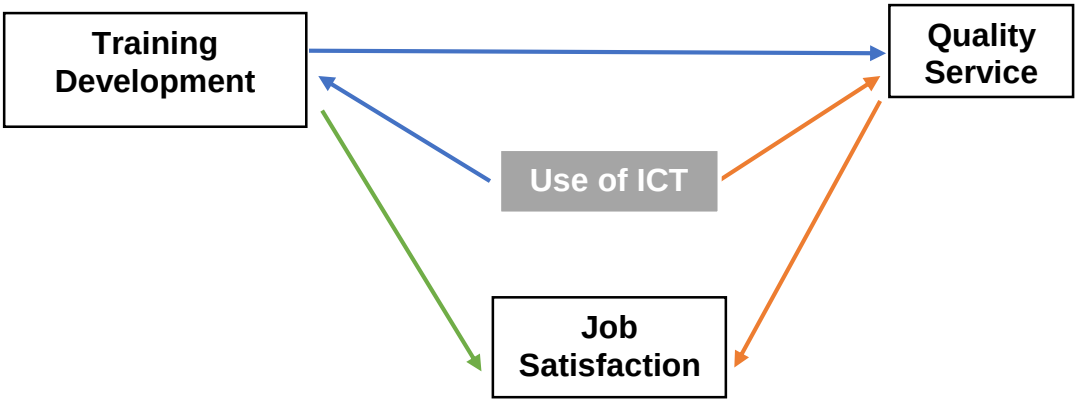



**Figure 1**: Framework

## RESEARCH METHODS

This study uses a qualitative approach by means of descriptions and narratives of previous research related to the use of Information Technology, training development, service quality and job satisfaction which is compiled with data on findings in the field, namely the Directorate General of Corrections, Ministry of Law and Human Rights of the Republic of Indonesia.

## RESULTS AND DISCUSSION

### Description of Correctional Service Information Technology Utilization

The era when the use of information technology in the Correctional Services process began since the establishment of the Directorate of Information and Cooperation Technology at the end of 2010 under the name of the Directorate of Information and Communication (Infokom), and began to effectively carry out its duties and functions since January 2011. In December 2015, the Directorate of Information and Communication changed to the Directorate of IT and Cooperation. The establishment of the Directorate of Information Technology and Cooperation aims to overcome the problems that existed at that time, namely:

1. In the field of information technology
   - The Directorate General of Community Affairs has difficulty managing data and information related to the registration of Community Assisted Citizens (WBP).
   - Data not integrated between Correctional UPTs, resulting in data redundancy.
   - Data on Correctional UPT and WBP, as material for leadership policy making, cannot be accessed quickly and accurately.
   - The absence of public information disclosure.
   - Correctional business processes that are not yet effective and efficient, thus creating opportunities for KKN practices.
2. In the field of cooperation
   - The cooperation function in the correctional facility is not yet going well.
   - The occurrence of overlapping cooperation.
   - The results of cooperation are not systematically documented.
   - The absence of cooperation standards.
   - Not all correctional officers have awareness about the importance of correctional cooperation.
   - The lack of access for the community to provide support for the correctional facility so that the correctional facility seems closed.

Efforts made by the Directorate to overcome these problems include building the capacity of Human Resources (HR), developing systems, improving work mechanisms, and fulfilling facilities and infrastructure. Human resource capacity building in the IT sector and cooperation is carried out at the central level, Regional Offices and Correctional UPTs either through onsite training or through teleconferences.

As a guide for IT development, an IT Blueprint was prepared at the Directorate General of Corrections. This aims to translate the vision and mission of the correctional so that the achievement of performance targets becomes systematic and measurable. The IT Blueprint is also used as a priority setting or direction for the implementation of IT development activities by considering risk factors, budget availability, availability of resources and other factors.

The optimization of correctional data management is carried out by developing a Correctional Database System (SDP). Initially, SDP only had a registration feature, after going through several stages of development, the SDP feature became more complete which accommodated all correctional functions, including prison service functions, prison development, health care, community guidance, security, and other functions. In addition, SDP has also succeeded in integrating data between Correctional UPTs. These data are real time data that can be accessed easily, quickly and accurately by both the correctional staff and the general public. A series of service standards and standard operating procedures were developed to guide the implementation of tasks. Facilities and infrastructure that support the implementation of tasks such as servers, computers, networks, and other facilities are met to support performance.

In order to build correctional cooperation, the Directorate opens communication channels through websites, social media, and direct approaches with partners. It is now easier for the community to provide support to prisons through a cooperative mechanism. Cooperation standards that contain the stages of starting cooperation, monitoring and reporting are also built to maintain the quality of the implementation of cooperation. The socialization of cooperation standards and capacity building for officers is carried out so that all levels have the same perception and capacity according to standards. Currently, an information system has also been built to manage data and information on correctional cooperation throughout Indonesia.

The Directorate of Information Technology and Cooperation also builds cooperation with foreign partners and strengthens communication and coordination with the international community. This makes the Directorate General of Corrections more active in international meetings to share and learn best practices in the field of correctional facilities that can be developed in Indonesia. For example, technological developments in the field of correctional facilities, the latest developments on the architecture of prison buildings, trends in the types of criminal acts in other countries, patterns of guiding prisoners, and other lessons.

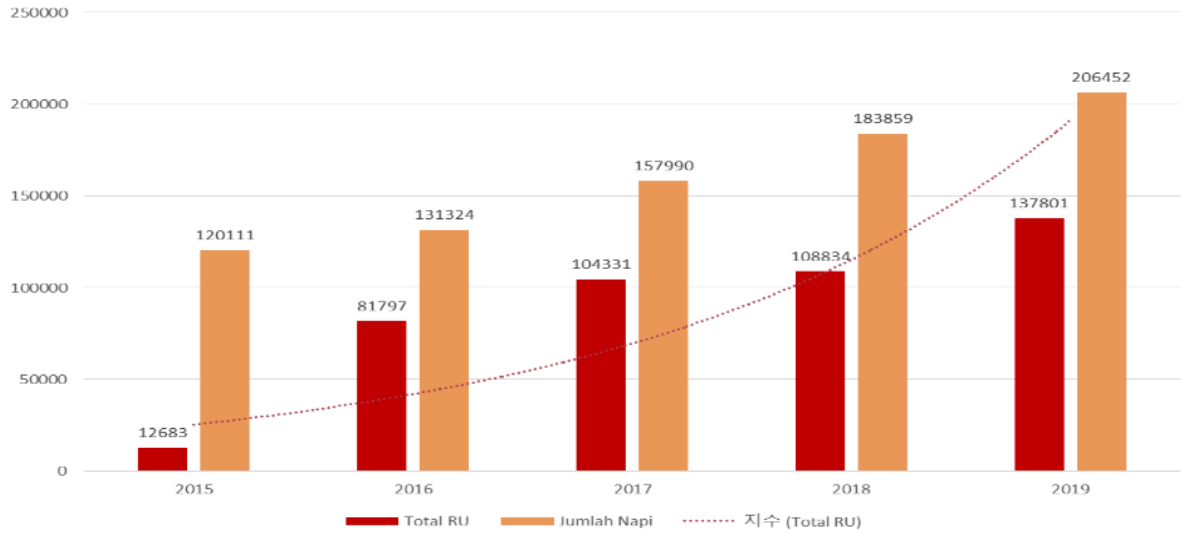
### Forms of Digitalization of Correctional Services

1. Online Remission (Reduction of Criminal Period)
   The process of providing remissions, pre-release leave, conditional leave, and parole which was initially carried out manually and required a long and time-consuming process can now be carried out more quickly, precisely and accurately.
   The problems before online remission are as follows:

- The proposed remission files for prisoners are still in the form of paper letters sent by the Head of the District Office of the Ministry of Law and Human Rights and sent to the Directorate General of Corrections.
- The process of managing remissions takes a long time.
- Large file shipping costs
- Piling up of remission proposal files in the technical directorate office makes work slow and takes up a lot of space to store remission proposal files.

Through innovation by utilizing information technology, the manual remission process becomes online. The main benefits of this innovation:

- The remission application process has become more effective and efficient.
- The remission proposal process can be proposed automatically to the center when all administrative requirements have been met.
- Once approved, remissions can be downloaded via the SDP application and printed directly at the Correctional UPT.
- Cut file shipping costs.




**Graph 1.** Remission Data for 2015-2019

**Table 1.** Remission provision in the last 5 years

| Year | Total RU | Number of prisoners |
|---|---|---|
| 2015 | 12683 | 120111 |
| 2016 | 81797 | 131324 |
| 2017 | 104331 | 157990 |
| 2018 | 108834 | 183859 |
| 2019 | 137801 | 206452 |

**2. Online Parole**

Those "Paperless" are the words that the SDP App seeks to achieve in a feature that is rapidly trying to accommodate. Manually the process of applying for parole (PB) requires a lot of time and files. If previously there were submissions manually using files, submissions with the SDP application are expected to reduce file sending and printing. By proposing PB through the SDP application, only 3 files were sent to the Center in accordance with Article 57 paragraph 4 of the Regulation of the Minister of Law and Human Rights of the Republic of Indonesia No. 21 of 2013 concerning the Terms and Procedures for Granting Remissions, Assimilation, Family Visiting Leave, Parole, Leaving Leaving, and Parole.

The aims and objectives of the online and digital PB print authorization are as follows:

- Acceleration and Certainty of Information. The delivery of the approved PB Decree will be more effective and efficient. Starting from being signed by the Director General of PAS until the SK PB is received at the UPT, which initially took up to 3 (three) weeks, then using the SK PB Printing Authorization mechanism in correctional institutions / detention only takes a maximum of 5 working days.
- Simplify monitoring and speed up the process of sending SK PB.
- Reduction in duplication and shipping costs of SK PB.
- Reducing the occurrence of abuse of authority, increasing transparency / disclosure of information on Correctional Services, and effectively eliminating the occurrence of gratification behavior.

In detail, there are significant differences in services in terms of processing time for proposals from the UPT Rutan and Lapas to the issuance of the PB Decree. The following is a comparison of the process of granting parole manually with sdp (digital-online):

**Table 2.** Time Comparison (Manual - Digital)

| NO | SATKER | MANUAL | TIME | SDP (DIGITAL_ONLINE) | TIME |
|---|---|---|---|---|---|
| **1.** | **CORRECTIONAL INSTITUTION** | - Preparation of PB Proposed Files (PB Administration Requirements)<br>- Create a PB Proposal List<br>- TPP Session Process<br>- Delivery of PB Proposed Files to Regional Offices | - 2 Mth<br>- 7 day<br>- 3 day<br>- 7 day | - Preparation of PB Proposed Files (PB Administration Requirements)<br>- SDP Data Process Integration Features (Data Input and Edit, TPP Session, Send PB Proposed Online Data)<br>- Delivery of PB Proposed Files to Regional Offices | - 1 Mth<br>- 3 day<br>- 7 day |
| **2.** | **REGIONAL OFFICE** | - Acceptance of PB Proposed Files<br>- Create a PB Proposal List<br>- TPP Session Process<br>- Delivery of the Proposed PB Files to DITJEN PAS | - 1 day<br>- 7 day<br>- 3 day<br>- 14 day | - Online Data Process SDP Integration Features (Receive Online Data, Edit Data, Meet TPP, Send PB Proposed Online Data) | - 3 day |
| **3.** | **DITJEN PAS (Per session of the Central TPP) Total + 1500 files** | - Acceptance of PB Proposed Files (input proposal data entry)<br>- Checking PB Proposals<br>- Preparation of TPP Session Materials (input data on the TPP trial proposal)<br>- TPP Session Process<br>- Recommendations on Results of the TPP Session<br>- SK PB Manual Editing and Printing<br>- Quality Control SK PB<br>- Doubling the PB Decree<br>- Legalization and copy of SK PB<br>- Sending SK PB to UPT | - 7 day<br>- 1 day<br>- 1 day<br>- 1 day<br>- 3 day<br>- 7 day<br>- 7 day<br>- 7 day<br>- 7 day<br>- 7 day | - SDP Online Data Process Integration Features (Receive Online Data, Edit Data, Session of the TPP, Send Online Data Recommendations of PB Proposals / Print Authorization SK PB to Kanwil / UPT) | - 14 day |

**3. Self Service**

The problems before implementing self-service are as follows:

- The existence of illegal levies in the implementation of services,
- Uncertainty and uncertainty about the rights of the WBP that will be received,
- Non-uniformity in providing information to WBP,
- There is excessive interaction between visitors and officers in correctional services so that there is potential for irregularities.

The Directorate of Information Technology and Cooperation has made innovations by utilizing information technology to improve the quality of service to prisoners and their families through self-service applications. The main benefits of this innovation:

- Fulfill the rights of the WBP in obtaining information
  - Before: WBP comes to the officer to ask about the date of release, the date when he can propose PB, how many get remission.
  - After: WBP simply scans the fingerprint on the device and all registration information can appear.
- Ease of getting information
  - Before: WBP must wait for the registration officer to be available for information.
  - After: WBP can get information anytime.
- Eliminate the potential for illegal levies
  - Before: potential illegal levies by officers in obtaining information.
  - After: in the absence of contact with the officers, there are no illegal fees in obtaining information by the WBP.

**4. Use of Barcodes**

The state confiscated property storage house (rupbasan) has very important authority as a place to store confiscated objects and state booty for the

purposes of the judicial process as mandated by Law No. 8 of 1981 concerning KUHAP in article 44. However, in the process of storing confiscated objects and booty from the country there are several problems, namely:

- There was an error inputting information on confiscated objects and state booty because they still used the manual system. Recorded in the book and the label on each item is still using paper.
- Entering data manually takes a long time.
- Control and supervision of confiscated objects and state booty has not been running optimally so that the entry and exit of goods from storage areas is often not detected.
- To make it easier for Rupbasan officers to manage basan and baran.

The Directorate of Technology and Cooperation develops barcode systems. The use of barcodes to facilitate the registration of confiscated objects and spoils of the state at the State Storage and Confiscation House (Rupbasan). Make it easy for Rupbasan officers to manage, maintain, secure and search for Basan Baran's identity. Benefits of using barcode:

- Reducing various errors that may be made when inputting information with a manual system
- The basan and baran registration process can be completed quickly, in a matter of minutes, thus saving time in completing work.
- All incoming and outgoing lines and lines can be barcode scanned so that they can be recorded correctly and minimize errors.
- The use of barcode technology is very easy to operate, just scan it and detailed information about the item will appear.
- Reduces the possibility of mistakenly confusing waste and goods and reduces revenue and expense queues

**5. Development of Correctional Cooperation Information System**

Strengthening coordination and collaboration with stakeholders through important cooperation mechanisms carried out by the correctional ranks to support the implementation of duties and functions. This is because the community or third parties are one of the main elements in the implementation of prison development. For this reason, the UPT Pemasyarakatan is encouraged to build cooperation with related partners.

- The cooperation function in the correctional facility is not yet going well.
- The occurrence of overlapping cooperation.
- The results of cooperation are not systematically documented.
- The lack of access for the community to provide support for the correctional facility so that the correctional facility seems closed

To overcome this problem, the Correctional Cooperation Information Attitude (SIKAP) was built. SIKAP is an information system that provides data and information on Correctional cooperation to be accessed by stakeholders easily and quickly.

Currently, with SIKAP, it is easier for the UPT Penitentiary to submit cooperation reports, access regulatory documents related to cooperation, and access data on other UPT Corrections cooperation. For the Directorate of IT and Cooperation, it is now faster to get data on correctional cooperation throughout Indonesia, easier to monitor and evaluate the implementation of cooperation, and to manage cooperation activities properly. Meanwhile, for stakeholders, can access information about correctional cooperation both at the central level and Correctional UPT. In addition, Stakeholders can also propose cooperation through SIKAP.

### Digital-Based Correctional Services Innovation SMS Gateway

The Directorate General of Corrections has the need for data reporting on WBP in UPT Corrections throughout Indonesia. Initially, the reporting was done manually by letter from the UPT to the Directorate General of Corrections, so it took a long time to get the data. This has an impact on data that is not actual. To solve this problem, the Directorate of IT and Cooperation developed the SMS Gateway application.

SMS Gateway is a system for reporting the number of WBP based on SMS and a website to find out the number of occupants, special occupants, children, care, clients and guidance of bapas, basan baran, employees, foreigners, budget and realization, land area and buildings, the number of residents is added less, and overstaying. Data on the SMS Gateway application is obtained from each UPT Pemasyarakatan by sending SMS to a certain number, and then managed by the system. This data can be accessed directly through the website http://smslap.ditjenpas.go.id/.

Currently, reporting has used the SMS Gateway, so data retrieval can be done quickly. In addition, data is presented in real time so that data accuracy is more guaranteed. This application also ensures openness of information, because the data can be accessed directly by the public.

### Correctional Database System (SDP) Alert: Group Chat Application

SDP Waspada is a group chat application created as a support system in the correctional environment, starting from the UPT, Regional Office, Directorate General of Corrections to the Ministry of Law and Human Rights which functions to improve the mechanism for reporting information on the condition of a detention center / prison.

Problems faced prior to the implementation of this initiative:

- There is a delay in reporting about an event that occurred at the detention center / prison.
- There is a gap in the speed of receiving information, for example external parties know ahead of time than internal parties in the correctional facility when there is a fire or riot at the detention center / prison.
- The absence of media as a channel of communication between correctional staff specifically within the Directorate General of prisons.

In the Alert SDP application, correctional officers can see notifications / chat about important events that occur. If

there are new users who need to access the application, they must register first before logging in via the web version of SDP Waspada.

With SDP Waspada, important and confidential correctional information can be conveyed quickly and safely. For example: A riot or fire occurred in an UPT, the related parties had to broadcast information to the group, so that officials at the regional office, the Directorate General of Corrections to the Ministry of Law and Human Rights were aware of the incident. User and group management is managed in the smslap. After the creation of the Alert SDP, the benefits obtained are:

- The channels of communication between community officers at the UPT, regional offices, the Directorate General of Corrections and the Ministry of Law and Human Rights are accommodated with safe channels.
- Dissemination of the latest information becomes faster, so that relevant officials in the correctional environment can immediately take action or decisions related to events that occur.

### Development of Employee Training in Information Technology

Currently the number of correctional officers throughout Indonesia is 44,291 people spread across 662 Correctional Technical Implementation Units (UPT) (remand centers, prisons, bapas and rupbasan), 34 regional offices and 1 central unit in the Directorate General of Corrections.

Regarding officers with a background in information technology, special recruitment is not carried out, so that most of the officers have legal or social background education. Skills in the field of information technology are additional skills you have as education is followed. So, in this case the training of officers related to the use of information technology is very important.

In particular, there is also no training related to information technology held through the organization's internal budget, so the training carried out is in the form of mentoring or assistance by the head office officers to officers or operators in the Correctional Technical Implementation Unit (UPT) and regional offices. The three training mechanisms that have been carried out are through the teleconference mechanism, the technical consultation mechanism (KONTEK) organized by the head office and regional offices. In addition to these three mechanisms, an online assistance mechanism is also carried out in the form of assistance or consultation on problems conducted online through the web link http://sdp.ditjenpas.go.id/helpdesksdpditjenpas

## CONCLUSION

Use of information technology for correctional services carried out by the Directorate General of Corrections of the Ministry of Law and Human Rights of the Republic of Indonesia is held in order to create quality service products. To support this, the development of training for officers related to the use of information technology is carried out so that they can optimize existing information technology. The use of correctional service information technology, supported by trained officers, has a positive impact on service quality and the level of job satisfaction of officers.

The data show that correctional service information technology has accelerated business processes from months to days, is transparent and accountable. This study supports previous studies which show that service quality will increase job satisfaction.

However, this study shows that the role of officers in the use of information technology has not been optimally utilized. This can be seen from the absence of special recruitment of officers with a background in information technology education and the lack of training held, even though the need for competent officers in this field is urgently needed.

## RESEARCH SUGGESTIONS

This research was conducted in a Covid-19 pandemic, which greatly affects the use of information technology in correctional services. Organizations are expected to quickly adapt and innovate in the use of information technology during a pandemic. Some aspects such as leadership style, generation of millennial officers, technology, in this study are still neglected so they need to be included as supporting variables in subsequent research. In terms of the methodology of descriptive analysis, the descriptive analysis has not identified more depth related to the research proposition, so that the next research is suggested to deepen it through observation and in-depth interview process. Furthermore, testing different samples may enrich the literature regarding the use of information technology. As this study has put attention on information technology application in the correctional service, future studies may be done in police department or court, which will shed more lights in the area of Law and Technology.

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