SIKADES: Empowerment-digitalism-based start-up to advance peace and order in Indonesia

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Abstract. The security is an important factor in investment, so it is not surprising for regions with a high level of security coupled with high investment. Indonesia as a large country spread over 34 provinces, the level of security of each region is also varies, but there are still many areas that have a high crime rate. Various factors that trigger high crime include high poverty, unemployment, education, and lifestyle. For this reason, an effective and efficient formula for enhancing peace, public order, and community protection starts from the lowest level, namely Village. The model used is Sikades, a security model based on the empowerment of criminals, recidivists, village thugs and unemployed who have been empowered to become Village Civil Service Police Personnel (From Zero to Hero) and integrated with online-based applications that help personnel and the community to give and receive reports on the current security situation in all villages in the district. This model provides a sense of security and comfort for the community.

1. Introduction

Indonesia is a large country with the fourth largest population in the world with a total of more than 260 million people spread in 34 provinces [1]. The poverty rate, unemployment rate, education level, lifestyle and income make some people choose to become criminals to meet their needs. Based on data released in 2018 by the Central Statistics Agency (Badan Pusat Statistik, abbreviated BPS) in Indonesia, it can be concluded that every 1 minute 33 seconds (93 seconds) a crime occurs [2]. The data can be seen in Figure 1.
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Figure 1. Time lapse of crimes in Indonesia (2000-2017).

The figure is quite high. This is confirmed by the data of 10 provinces with the most crime reports issued by BPS on December 12, 2019 [3], as seen in Figure 2:

Figure 2. The regional police of the Republic of Indonesia that receives the most crime reports.

Figure 2 shows us that Jakarta is the area with the most crime cases in Indonesia. The Central Statistics Agency (BPS) noted that the Metro Jaya Regional Police received the most crime reports in Indonesia [3]. The number of crimes reported to Metro Jaya reached 34.7 thousand incidents. Then, followed by East Java with 32.9 thousand reported crimes. Viewed from the highest crime risk level in 2018, there were North Sulawesi and West Papua. The level of crime risk in North Sulawesi is recorded at 416 and
West Papua is 380. For information, total crime is the number of crimes that occur [4]. Meanwhile, crime rate is a crime rate per 100,000 populations [5].

Reading these figures, the government is trying to continue to suppress the crime rate [6,7], including increasing the welfare of personnel as an effort to improve the performance of law enforcement officers to prevent and overcome crime [8]. However, these efforts are still not optimal [9,10] and certainly need formula and comprehensive cooperation from every element of government to overcome this problem [11,12]. Because, beside all security problems there are other problems that should not be borne by the POLRI institution alone. It needs collaboration between the Central Government, in this case, the National Police and the Regional, provincial and district/city governments [13].

1.1. The factor of high crime rates
The phenomenon of crime is influenced by several factors [14], namely: 1) poverty. Poverty often turns people into furious [15]. For those who are impatient, poverty can be a motivation for committing crimes in order to get a large income with a small business of fraud, theft, hijacking and robbery; 2) Income. The imbalance between income and needs can emerge desire to do crime. For example, a father that needs to buy milk for his child will blindly easier to do the crime.; 3) Education. Low levels of education make it difficult to find employment [16], or existing jobs require a certain level of education [17]. Moreover, in some professions skills that can only be obtained through education such as technicians [18]. Limitation of this level of education often makes a person desperate to become a criminal; 4) Lifestyle. A forced lifestyle can be dangerous [19]. Bite off more than what you can chew, the amount of expenses due to lifestyle can make someone do everything, including to do crime, as long as it brings them luxurious life [20].

One of the regional governments that succeeded in implementing this is the Empat Lawang District Government, which is located on the West side of South Sumatra Province [21]. So far, the District of Empat Lawang is indeed famous for the highest crime rates [22]. In fact, Empat Lawang is often considered as the Texas of South Sumatra. The term "squirrel jump" is found here. There is a slogan in Empat Lawang society that sounds “nedo munoi mati jadia” [23], it means if people do not kill, they will be killed, it makes the paradigm for some people that life has only two choices between killed or being killed as the salvation [24].

1.2. Sikades model
That was how the idea of building Sikades borns, a security system based on Android and online [11,25] that is fully supported by the Regent of Empat Lawang. After this system implemented, the crime rate is reduced up to 80% [26]. The system is able to absorb 400 people as personnel and reduce unemployment up to 2%. The most important thing is that people feel safe and protected. It proven by people dare to travel alone, day and night [26].

Based on this background, this paper offers a model as an effort to solve problems in improving public security and public order sectors, from upstream to downstream [12]. This paper aims to introduce the model in an effort to overcome challenges as the security sector, from community empowerment to the use of IT [27-29].

2. Methods
The design of this model uses research and development methods [30]. It is based on the results of an analysis in existing research. This model works based on an information transfer system through applications [31] that have been socialized to personnel who have been trained, and to the wider community. The design of this model can be seen in Figure 3. In Figure 3, it can be seen that people who have been empowered are trained to actively provide security information [13] in their responsibility area. This model makes integration between villages to be able to guarantee the security, so people in each village can get the information and the sense of security comfort actually and accurately all the times [32].
3. Results and Discussion

The integrated interaction model is an effort to overcome one of the security problems, because once again security is not only the task of one particular agency [29]. However, security is a shared responsibility between government and society [33]. Collaboration is the key to the success of this application [11]. Reports from the public and the follow-up action from personnel will play a significant role in reducing crime. With an integrated system between villages, security problems will be more guaranteed [6].

![Diagram of Sikades model](image)

**Figure 3.** Highlights of Sikades model.

Figure 1 explains the path of transformation of some personnel from zero to hero is required to carry out a series of recruitment such as administrative selection, physical fitness selection, IT training until it is declared passed as some village security personnel through a decree of the head of the region.

Guidance for personnel is not only for physical development but also mental development, and discipline [7]. This is very important considering that the person being trained was once an arrogant thug which is identically arrogant. Therefore, it is important to provide training related to the use of IT to operate online applications prepared [29]. The goal is how to submit reports in the area, how to claim attendance, how to see information, how to follow up the reports, how to answer questions from the public as users [34], so that the community can be helped by asking for help using the applications [11].

The steps for implementing and applying this model are:

3.1. Planning

At this stage, the concept design phase is carried out. The explanation of the stages is as follows:

3.1.1. Concept design. At this stage, a work concept model design and workflow are carried out, so it can be used as a basis in making websites, applications and service systems.

3.1.2. Analysis of personnel needs. At this stage, an assessment of the number of personnel needed is carried out with indicators of population, area and vulnerability.

3.1.3. Determination of training schedules and partners. Determination of the schedule must be synchronized with the partners chosen to conduct training and mentoring both mentally and physically, the partners chosen can be from the TNI / POLRI or third parties.

3.1.4. Website creation and application. At this stage, programming is done to build a system on the website, besides that a database is built as a data storage medium, both reports and information. Then the interface is made so that the website has an attractive appearance and is easy to use.
3.1.5. TESTING. At this stage, a system test is performed to determine the shortcomings of the built system. Testing is carried out in stages by testing every feature in the model.

3.1.6. IMPROVEMENT. After testing, the next step is improving the system, improvements are made by referring to the results of the trial, by correcting the errors that occur during the trial.

3.2. IMPLEMENTATION
The process of applying the model, starts from the introduction of the services to personnel and the community [25]. Personnel are emphasized to always actively report the latest situation in their respective areas, because the security problem is a problem combination that requires work from the government and the community to create a safe and comfortable a society [35]. Then, upgrading features such as Maps, Emergency are continually done [36].

The success of this implementation will provide multi benefits, includes: 1) Empowering community [37] who used to be a troublemaker become a disciplinarian and those who used to be a thief become security, what was once a thug is now a hero; 2) Opening jobs. For personnel who were previously unemployed, after officially becoming personnel, they will get a monthly salary that can be used to meet the needs of life to improve the welfare of their families [38]; and 3) by implementing this system, it will increase the sense of security and comfort of the community to carry out daily activities [39].

4. CONCLUSION
Sikades can be a solution and effort to improve peace for public order and community protection to welcome sustainable development, Sikades makes it possible to monitor real time security conditions in each village. In addition, Sikades can also be a solution for community empowerment and reducing unemployment. The Sikades certainly cannot be a complete solution without the commitment of the people and the government itself as formers of regulations and policies. For this reason, collaboration is needed between the government as a developer and the community as users as an effort to create a safe Indonesia.

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