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# STRATEGIES FOR PREVENTING AND CONTROLLING EMBEZZLEMENT IN INDONESIA THROUGH THE APPLICATION OF SITUATIONAL CRIME PREVENTION APPROACHES

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## ABSTRACT

**Objective:** This research aims to explore the potential application of Situational Crime Prevention (SCP) theory as a crime prevention approach that focuses on criminogenic situations, particularly in the context of embezzlement in Indonesia.

**Research Design & Methods:** This research uses a descriptive qualitative approach with a literature review based on the TASP model to analyze patterns of embezzlement in public procurement in Indonesia. Prevention strategies were designed using the principles of Situational Crime Prevention (SCP) with a focus on controlling crime situations.

**Findings:** This study found that the application of Situational Crime Prevention (SCP) theory can significantly reduce opportunities for corruption crimes, including embezzlement, in Indonesia. The crime script technique helps map the stages of embezzlement, enabling the identification and elimination of criminogenic opportunities. SCP is more effectively applied to small-scale corruption by low-level officials, where the integrity of oversight institutions is more secure, compared to large-scale corruption involving high-ranking officials.

**Implications:** Implementing SCP emphasizes the importance of reducing opportunities for crime through technological surveillance, administrative transparency, and cross-disciplinary solutions before seeking socio-political structural reforms. Recommendations include strengthening electronic surveillance, transparent procurement systems, and ethics education for public officials to build a culture of accountability.

**Contribution:** This study shifts the focus of criminology in Indonesia from individual perpetrators to crime opportunities as direct causes. The research offers a practical action-based approach, combining modern theory with technological and administrative solutions to minimize corruption, providing a foundation for the application of SCP in local contexts.

**Keywords:** Embezzlement, Situational Crime Prevention, TASP Model, Corruption

JEL codes: K42, M48

**Article type:** research paper

## INTRODUCTION

Efforts to explain and address corruption often focus on the individuals involved in corruption as well as on the macro contexts that trigger corruption, such as structural social, political, and economic causes. In Indonesia, this phenomenon is reflected in various forms, including embezzlement and misuse of public funds that reflect a moral crisis and loss of trust in

institutions. This is in line with the concept of the Fraud Triangle, which states that corruption arises from individual pressures, opportunities, and rationalizations (Cressey, 1950). Weak systems of oversight and public administration often provide a loophole for this practice, where a culture of patronage and the practice of “facilitation payments” are often considered normal to speed up bureaucratic processes (Graycar & Sidebottom, 2012).

Rothstein & Li (2015) study highlights that factors such as the form of democracy, type of public administration, government size, social norms, and religion contribute to the level of corruption in different countries. Corruption remains a serious problem in Indonesia, reflected in the Corruption Perception Index (CPI) which only reached 40 in 2019, placing Indonesia 85th out of 180 countries. This figure shows that Indonesia is still stuck in the problem of corruption that is closely related to governance and its impact on social, economic, and political transformation. Indonesia's Governance Index score in 2020 was 5.4, showing stagnation in tackling corruption since 2012 (Satria, 2022). Prevention and eradication of corruption efforts in Indonesia are still ineffective, despite changes in the KPK Law that are more directed at preventing corruption.

At the national level, corruption is not only caused by individuals but also influenced by the wider context. For example, corruption is often linked to cultural traditions, the level of economic development, and government policies (Treisman, 2000). The historical and cultural traditions of feudalism in Indonesia, such as the *priyayi* mentality in the Javanese bureaucracy, have created a feudal-aristocratic inheritance of values mixed with colonial styles. This reinforces abuse of power, weakens public accountability, and impedes bureaucratic reform and corruption eradication (Hartatik, 2022; Haryatmoko & Tjahjoko, 2022; Setianto, 2010). The limited legal sanctions against perpetrators of corruption exacerbate the situation, creating major challenges in governance (Graycar & Sidebottom, 2012).

Alternatively, it may be helpful to examine corruption through a white-collar crime framework. Contemporary Western criminological theories have been developed to analyze white-collar crime. For example, Sutherland's differential association theory and Merton's concept of anomie focus on “the offender's motivation for committing white-collar crime or aspects of his or her condition or psychological traits” (Benson & Simpson, 2017). The increase in corruption can be attributed to economic and political developments in previous decades, such as the dismantling of state institutions and privatization, which created new opportunities for corrupt practices (Naim, 1994). Significantly, this analysis is in line with the arguments of Routine Activity Theory (RAT) and its perspectives on socio-economic trends and their impact on crime increase.

Embezzlement is one of the significant forms of corruption in various sectors of Indonesia, especially in public procurement activities. Data from the Corruption Eradication Commission (KPK) shows that procurement of goods and services is a major contributor to corruption cases, with 174 cases recorded in 2019. These cases caused state losses of up to 957.3 billion rupiahs due to embezzlement, budget misappropriation, and abuse of authority (Rohmaniyah et al., 2020). Practices such as price manipulation, collusion between business actors and public officials, as well as irregularities in the tender process are forms of abuse that are often found in this sector (Dewantara & Sukarmi, 2024).

The Situational Crime Prevention (SCP) approach offers a solution to embezzlement in the context of public corruption by focusing on reducing crime opportunities through the identification of situations that allow offenses, as proposed by Cohen & Felson (1979) through the Theory of Routine Activities. The TASP model developed by Graycar & Prenzler (2013) provides a framework for analyzing embezzlement based on crime type, activity, sector, and venue. The implementation of SCP in Indonesia is increasingly relevant with electronic systems such as SPSE aiming to increase transparency, although manipulation and abuse still occur, pointing to the need for improved oversight and internal controls (Huda et al., 2017). Conflicts of interest in budget planning exacerbate budget leakages that impact the achievement of social and economic goals (Rustiarini et al., 2019). The research shows that identifying opportunity factors in the context of embezzlement is important for designing more effective anti-corruption strategies and focusing on the criminal event itself, to provide more strategic insights to prevent corruption (Al-Rashidi, 2024; Tunley et al.,

2018). SCP provides a theoretical and practical basis for analyzing and designing better embezzlement control strategies in Indonesia.

This study uses SCP and TASP-based situational analysis to provide strategic recommendations to reduce opportunities for embezzlement in Indonesia. The strategies include improving oversight systems, strengthening prevention mechanisms, and increasing transparency and accountability, which are expected to create cleaner governance and integrity. The general objective is to enrich the criminological discourse in Indonesia by incorporating Western theory-based crime prevention strategies adapted to the local context, as well as expanding the framework of comparative criminology. The specific objective is to evaluate the application of SCP principles to address embezzlement in the public sector, by offering practical solutions based on environmental modification, which differs from approaches that focus on the root causes of crime. The findings of this research are expected to be effectively applied in various contexts in Indonesia.

## LITERATURE REVIEW

### Environmental Criminology Theory

Criminological theories provide a comprehensive conceptual foundation for understanding embezzlement, by explaining the factors that influence offenders' decisions, system weaknesses, and the social context that allows this crime to occur. Routine Activity Theory (RAT), for example, reveals that embezzlement occurs when there is a confluence of motivated offenders, vulnerable targets, and weak supervision. In practice, loopholes in administrative oversight, such as a lack of transparency in procurement, are often exploited by perpetrators to hide their actions (Felson & Boba, 2002). The Fraud Triangle, a theory developed by Donald Cressey, adds a psychological dimension by identifying pressure, opportunity, and rationalization as the three main elements that drive individuals to embezzle. Financial pressure, weaknesses in internal controls, and personal justification are often the main triggers for this behavior (Cressey, 1950).

In addition, environmental criminological theory explains embezzlement in a broader context, highlighting how social inequality, legal laxity, and institutional corruption create an enabling environment for crime. For example, collusion between public officials and contractors often exacerbates the exploitation of public funds, reflecting systemic imbalances in governance (Rynaldi, 2024). The multidisciplinary approach offered by this theory proposes combining technology-based strategies, such as the use of blockchain to increase transparency, with social policies that target economic inequality and ethics training for public officials (Adeusi et al., 2024).

However, challenges arise when overly restrictive preventive policies can stifle legitimate economic activity, especially for small businesses. Therefore, a balance is needed between effective regulation and economic sustainability to ensure that transparency and accountability are maintained without harming society. By integrating these theories, the approach to embezzlement can become more holistic, enabling the formulation of more effective strategies to reduce financial crime and increase public confidence in governance.

### Definition and Characteristics of Embezzlement

Embezzlement is a form of financial crime that occurs when a person entrusted with managing or overseeing certain assets illegally diverts those assets for personal gain. In the context of Indonesian law, embezzlement is regulated in Article 372 of the Criminal Code, which defines embezzlement as "the unlawful act of intentionally possessing goods that do not belong to him but are under his control due to certain legal relationships." Embezzlement can occur in various sectors, such as public procurement, financial institutions, and private organizations (Andreanto et al., 2023). Embezzlement refers to a form of white-collar crime where a person or entity misappropriates assets entrusted to them. In this type of fraud, the embezzler obtains assets legitimately and has the right to possess them, but the assets are then used for unintended purposes.

Embezzlement is characterized by several key traits: first, it involves abuse of trust, where the perpetrator exploits their position or authority to misappropriate someone else's property. Second, it occurs without authorization, meaning the perpetrator takes assets or money without

permission or legal right from the rightful owner. Third, the perpetrator typically has access or control over the embezzled goods or funds, as seen with managers, treasurers, or trusted employees. Fourth, embezzlers use the funds or assets for personal gain, benefiting themselves or unauthorized third parties, rather than for the agreed purpose. Finally, concealed criminal activity is another hallmark, as embezzlement is often carried out covertly or disguised, making it difficult for owners or authorities to detect the crime promptly.

### Concept of Situational Crime Prevention (SCP) Approach

SCP is an approach that focuses on crime prevention by reducing opportunities for offenders to commit crimes. It is based on the Routine Activity Theory (RAT), which emphasizes that crime occurs when there is a convergence between a motivated offender, a viable target, and a lack of adequate supervision (Cohen & Felson, 1979). Situational Crime Prevention (SCP) aims to minimize opportunities for crime through strategies based on five key principles. First, SCP seeks to increase the effort required by criminals to commit a crime, for example by increasing security measures on assets. Second, SCP works to increase the risk to offenders by ensuring effective surveillance, thereby increasing the likelihood of apprehension. Third, SCP focuses on reducing the rewards that offenders can gain from their actions, making crime less profitable. Fourth, SCP aims to remove excuses for committing crimes by encouraging compliance with social norms and rules. Finally, SCP seeks to reduce provocation by minimizing situations that may trigger criminal behavior. Together, these principles help prevent criminal activity by changing the surrounding environment to make crime more difficult and less rewarding. This model has been used extensively for various forms of crime, including financial crimes such as embezzlement (Graycar & Prenzler, 2013).

### Model TASP (Types, Activities, Sectors, Places)

The Types, Activities, Sectors, and Places (TASP) model developed by Graycar & Prenzler (2013) is a crime situational analysis tool used to identify opportunities that can trigger crime. The model classifies crime elements into four main categories. First, Types, which refer to a specific type of crime, such as embezzlement. Second, Activities, include crime-related activities, such as data manipulation in public procurement processes. Third, Sectors, identify the sector in which the crime occurred, such as the construction or health sectors. Fourth, Places, which is the location or institution where the crime took place, such as a government institution. In the context of embezzlement, the application of this model makes it possible to identify specific opportunities that can trigger crime, such as a lack of oversight in public procurement, so that prevention strategies can be more targeted and effective.

## METHODS

This research uses a descriptive qualitative approach with a focus on a literature review to explore strategies to prevent and control embezzlement in Indonesia. This approach aims to understand the phenomenon of embezzlement in depth through a situational analysis based on the Types, Activities, Sectors, and Places (TASP) model. This model allows the identification of crime opportunities in the context of public procurement so that it can be used to design relevant and effective prevention strategies. The data used in this study is sourced from secondary data, including official reports of the Corruption Eradication Commission (KPK), scientific journal articles, and various documents and reports related to public procurement in Indonesia. This data will be analyzed to identify patterns of embezzlement in public procurement, particularly in the public sector.

The analytical framework of this research includes two main stages. First, the identification of embezzlement patterns using the TASP model, which categorizes embezzlement based on the type of crime, related activities, sectors where embezzlement occurs, and specific locations that are hotspots. Second, the analysis of prevention strategies is conducted based on the principle of Situational Crime Prevention (SCP), focusing on reducing crime opportunities through better design

and control of the situation. This approach is expected to provide strategic insights to strengthen the public procurement system in Indonesia.

## RESULT

In 1976, a Home Office study entitled 'Crime as Opportunity' suggested a 'physical' approach to crime control by reducing the opportunities for crime to occur (Mayhew et al., 1975). This approach over time became known as SCP (Felson & Boba, 2002). SCP seeks to reduce the opportunities for certain categories of crime by increasing the associated risks and difficulties and reducing the rewards (Clarke, 1995). As illustrated in Table 1.

Table 1. Mechanisms and examples of techniques of SCP

Preventive Mechanism	Description	Preventive Technique
Improving Efforts	Increases the difficulty or effort required to commit a crime.	<ul style="list-style-type: none"> <li>Physical barriers: Installation of fences, security doors, and other barriers that make access difficult.</li> <li>Changes in routine patterns: Changing activity patterns that enable crime.</li> </ul>
Increasing Risk	Increases the likelihood of a crime being detected or the perpetrator being caught.	<ul style="list-style-type: none"> <li>Enhanced monitoring: Use of CCTV, regular patrols, or alarm systems that monitor vulnerable areas.</li> <li>Increase the number of witnesses: Organize a layout that allows more people to see the incident.</li> </ul>
Reduced Rewards	Reducing the profits made from crime.	<ul style="list-style-type: none"> <li>Restricting access to valuables: Store valuables in a more secure place.</li> <li>Safeguarding goods: Adding security systems to potentially stolen items or money.</li> </ul>
Reducing Provocation	Reduce factors that may trigger offenders to commit crimes.	<ul style="list-style-type: none"> <li>Noise or disturbance control: Dealing with disturbances that may lead to violence or other crimes.</li> <li>Reducing access to alcohol or drug substances.</li> </ul>
Eliminating Excuses	Reducing factors that give offenders a reason to commit crimes.	<ul style="list-style-type: none"> <li>Education or counseling: Providing information to reduce bad habits or unauthorized practices.</li> <li>Social regulation: Creating norms that reduce opportunities for crime.</li> </ul>

SCP does not aim to eliminate criminal or delinquent tendencies through the improvement of society or its institutions but only to reduce the attractiveness of crime to offenders. SCP has revolutionized criminological thinking, as it deals with offenders' choices and decisions to commit crimes, the impact of the environment on crime, and the different ways in which criminals and non-criminals perceive offending (Brantingham & Brantingham, 1993). This fundamental shift in the conception of crime is due to the emergence of opportunity theories of crime that focus on micro-level prevention techniques, such as direct manipulation of criminogenic situations, instead of introducing macro-level interventions embodied in the crime e.g. in addressing the social causes of criminality. SCP and opportunity theory are considered a 'new criminology of everyday life' that accepts crime as a 'normal social fact', a predictable outcome of people's daily routine activities in their communities (Garland, 2002). However, to better explain SCP, it should not be separated from its theoretical framework.

The Rational Choice Perspective (RCP) emphasizes the direct decision-making process of offenders, which is influenced by rational calculations of the risks and benefits of committing criminal acts (Clarke, 1980; Clarke & Cornish, 2017). In contrast to traditional criminological theories that focus on the psychological or social factors of offenders, RCP sees crime as purposive behavior to achieve certain benefits, with limitations such as time, risk, and effort (Felson & Clarke, 1998). This approach is relevant for crime prevention through the manipulation of situations that



encourage criminal behavior. Specific analysis of specific crime types is required as each crime is influenced by unique situational variables (Felson & Clarke, 1998).

On the other hand, Routine Activity Theory (RAT) explains the increase in crime from the 1960s to the 1980s in the United States and Western Europe as a result of socioeconomic changes that created routine patterns of activities in daily life (Cohen & Felson, 1979). This theory suggests that crime occurs when three elements meet simultaneously: a potential perpetrator, a suitable target, and the absence of a capable supervisor. As an opportunity theory, RAT is more relevant to predatory crimes such as direct violence, but can also be applied to financial crimes such as embezzlement, where public money (the target) can be misappropriated without the victim's knowledge (Felson & Clarke, 1998).

In Indonesia, embezzlement is often linked to corruption, which has become a serious issue in the government and corporate sectors. Indonesia's legal framework, such as Law No. 31/1999 on Corruption Eradication, aims to combat corruption, including embezzlement. However, despite these laws, law enforcement mechanisms often lack effectiveness, allowing embezzlement to continue. The inability to enforce the law, slow judicial processes, and lack of accountability for powerful officials contribute to the continuation of embezzlement (Faiki, 2023). Major cases of corruption often face lenient sentences or lengthy legal proceedings, which do not result in timely justice. Therefore, the gap between legal provisions and their implementation further exacerbates the problem of embezzlement in Indonesia.

The profile of embezzlers in Indonesia often shows certain demographic patterns, with most embezzlers being men who hold executive or senior positions in government agencies and companies. These positions give them access to substantial financial resources as well as decision-making authority, which makes them more vulnerable to engaging in embezzlement practices. The concentration of embezzlers in high-ranking positions in government agencies has led to significant losses to the state, with public funds diverted to private interests (Prita DS et al., 2020). This pattern emphasizes the importance of stricter oversight and stronger accountability measures at all levels of government and corporate management to prevent further embezzlement.

To effectively address the problem of embezzlement, many experts argue that the focus should not only be on punishing perpetrators but also on systemic reforms that lead to increased transparency and crime prevention in the first place. Strengthening institutional integrity through improved financial management systems, stricter independent audits, and better oversight of financial transactions can help combat embezzlement. In addition, creating a culture of accountability and transparency in public and private institutions will reduce opportunities for embezzlers to exploit their position to carry out criminal acts. With such measures, Indonesia can reduce the negative impact of embezzlement and rebuild public trust in government and business systems.

### Application of SCP on Embezzlement

The application of Situational Crime Prevention (SCP) to corruption is increasingly recognized as a relevant and effective approach. Before SCP was officially conceptualized, Cressey (1950) highlighted that the "opportunity" that exists in a position of trust serves as a powerful "temptation" for individuals to engage in embezzlement. This idea is supported by empirical evidence, such as the study conducted by Button & Gee (2012), who through interviews with 16 fraudsters showed that the availability of opportunity was a key factor in their fraudulent activities.

In recent years, SCP has been widely applied to various forms of criminal behavior, including organized crime (Bullock et al., 2010), fraud (Felson & Clarke, 1998), and corruption (Graycar & Sidebottom, 2012). This is in line with the basic tenets of opportunity theory, which states that "opportunity plays a role in causing all crime" (Felson & Clarke, 1998). Although the literature linking SCP to corruption is still limited, SCP principles can be applied within the framework of white-collar crime prevention.

Piquero et al. (2011) suggest that analyzing white-class crime provides valuable insights into understanding and preventing corruption due to the similarities between the two. In contrast

to street crime, white-collar crime, including corruption, relies on specific opportunities arising from access to positions of power, organizational weaknesses, and gaps in surveillance systems. This difference emphasizes the importance of tailoring SCP strategies to address situational factors that enable corruption, such as weaknesses in oversight, collusion, and gaps in accountability mechanisms. By addressing these opportunities, SCP can provide focused and practical solutions to reduce corruption, making it a critical tool in the fight against white-collar crime.

The first step in applying Situational Crime Prevention (SCP) to corruption is to conduct a very specific analysis of a particular type of crime, rather than a broad range of crimes (Clarke, 1995). As each crime occurs in a different context, a “crime-specific” approach needs to be applied to focus the analysis on a more specific crime and to apply SCP techniques to that case (Gorta, 1998). The selection of a specific crime helps to understand the structural opportunities, effort required, risks posed, and potential gains associated with that crime, making the application of SCP techniques more effective.

The second step in applying Crime Prevention Through Environmental Design (CPTED) theory to embezzlement is to adopt specific techniques to analyze the crime and identify “tipping points” that allow for the application of appropriate situational interventions. This process aims to elucidate the opportunity structure present in the crime of embezzlement so that interventions can be focused on the most vulnerable areas. In this regard, “crime scripts” play an important role by describing the steps that must be taken for a crime to occur. Crime scripts are particularly relevant in the case of embezzlement because the crime relies heavily on “opportunity structures that are often job-related”, where such structures enable acts of corruption. Once the crime script describes the structure of the crime, interventions can be designed by pinpointing specific opportunities associated with the crime, where situational measures can be applied to prevent embezzlement from occurring.

In the context of opportunity theory, as described by Routine Activities Theory (RAT), there are three main elements, targets and surveillance help describe the opportunity structure of crime and how it can be manipulated through situational interventions. Embezzlement, for example, can only occur if there is a perpetrator with malicious intent and a suitable target, such as public money, that is located in a place that lacks adequate supervision, such as a weak surveillance system. The uniqueness of embezzlement lies in the fact that this crime does not necessarily involve physical contact between the perpetrator and the target. “Space” in this case does not only refer to physical places but also includes networks that facilitate interactions between perpetrators and victims, such as employment networks that connect officials with misappropriated public money. The opportunity structure of embezzlement is therefore better understood as a series of actions in which the perpetrator has to make decisions at each point, leading to the occurrence of the crime.

While identifying the sequence of events in embezzlement crime scripts requires in-depth analysis, such as by examining police and prosecutorial documents, embezzlement generally involves three manageable stages: deception, abuse of trust, and concealment. This crime script reflects a broader process involving multiple phases, each of which creates an opportunity for the crime to occur. In this sense, a “local opportunity” analysis focuses on the way corruption emerges when the perpetrator meets the target, while a “systemic opportunity” analysis looks more at the broader socio-political causes that can fuel corruption.

Identifying the various critical points in the embezzlement process, policymakers can respond by designing appropriate situational techniques to block any opportunities in the process. These control measures aim to make criminal activities “Difficult, Risky, Unprofitable and Unforgivable”. Such measures need to be adapted to Indonesia's domestic regulations and laws, such as those stipulated in Law No. 20/2001 on the Eradication of Corruption. This law provides for criminal sanctions against embezzlement committed by state officials, including imprisonment and fines, and emphasizes that any form of abuse of office or authority for personal gain that harms the state is a corruption offense (Pasal 2 and 3 of Law No. 20, 2001). Therefore, efforts to control

embezzlement need to be adjusted to the principles stated in this law, such as increasing transparency in the public procurement process, introducing a more open reporting system, and conducting more intensive and systematic audits by applicable legal provisions in Indonesia (Felson & Boba, 2002).

## DISCUSSION

### Relevance of SCP in the Prevention of Embezzlement

The use of Situational Crime Prevention (SCP) in the context of corruption is not a new concept. In 1950, Cressey recognized that the “opportunities” associated with positions of trust create “temptations” that can lead to embezzlement (Cressey, 1950). A study involving interviews with 16 people convicted of fraud revealed that the availability of opportunities to commit fraud was critical to their actions (Button & Gee, 2012). In recent years, a growing body of empirical research has extended the application of SCP to a range of criminal activities, including organized crime (Bullock et al., 2010), fraud (Felson & Clarke, 1998), and corruption (Graycar & Sidebottom, 2012). This is in line with the basic tenets of opportunity theory, which states that “Opportunity plays a role in causing all crime” (Felson & Clarke, 1998). While there is limited literature linking SCP specifically to corruption, the relevance of SCP to corruption can be examined in the broader context of strategies aimed at preventing white-collar crime.

#### 1. Type, Activities, Sectors, and Place (TASP) framework

The first step in implementing Situational Crime Prevention (SCP) related to corruption is to focus on a specific type of crime, not on various types of crime in general (Clarke, 1995). Considering the contextual nature of each crime, a crime-specific approach is necessary to address criminal activity in a more targeted manner and effectively implement SCP (Gorta, 1998). The selection of a specific crime type allows for an in-depth analysis of the structural opportunities, level of effort required, risks involved, and potential gains to be made. This analysis facilitates the application of SCP techniques to the crime in question.

According to the World Bank (1997), Corruption, defined as “the misuse of public office for private gain”, includes various forms such as bribery, trading in influence, embezzlement, and misappropriation of assets. Due to the variety of corruption activities, each of its forms tends to occur in different contexts, locations, and sectors. Graycar & Prenzler (2013) propose four dimensions as an analytical framework to dissect corruption events, namely type, activity, sector, and place (TASP). Using this framework, corruption events can be categorized to facilitate analysis. For example, embezzlement (type), in the procurement of goods and services (activity), in the construction sector (sector), and government institutions (place) will be the unit of analysis for the application of SCP.

Embezzlement is defined as “the fraudulent utilization for personal gain by an official of property or money entrusted to him by another person.” (Cressey, 1950). To clarify the specifics of this crime, its scope of action needs to be described in detail. One frequent mechanism of embezzlement is through small-value local contracts that do not require complex procurement procedures. In these cases, a procurement official can illegally approve payments to themselves by signing unnecessary contracts on behalf of the government. For example, a government official signs a road reconstruction contract that is not needed just to divert some of the funds from the contract for personal use.

Table 2. Crime script of embezzlement.

Phase	Action	Action
<b>Fraud</b>	Providing false information regarding the need to sign unnecessary contracts	In this phase, the perpetrator conveys false information to create justification for a particular



<b>Abuse of Trust</b>	to induce the government to issue money transfer orders. Paying part of the money to the contractor, while the other part is diverted to corrupt officials.	budget requirement, which has no relevant basis in the work or procurement process. In this case, the perpetrator used the trust given to channel funds illegally. Some of the funds are used as intended, while the rest are misappropriated for personal gain.
<b>Disguise</b>	Cover up the crime by doing low-quality alternative work just to pocket the price difference.	This phase involves manipulation, where work is done in a perfunctory or substandard manner as a way to hide the embezzlement that has been committed.

## 2. Opportunities structure and crime script

The second step in the application of Situational Crime Prevention (SCP) is to analyze specific crimes to identify pinch points that allow for situational intervention. This approach aims to understand the underlying opportunity structure of crimes, such as embezzlement, to enable the design of effective prevention strategies (Bullock et al., 2010). One of the main methods used is crime scripting, which is the mapping of important stages or steps that allow a crime to occur (Cornish, 1994). By mapping these stages, specific countermeasures can be implemented to inhibit opportunities for crime at each phase. Embezzlement itself has unique characteristics as it often takes place through professional networks or bureaucratic processes without direct contact between the perpetrator and the target (Benson et al., 2009). In this context, “space” is no longer limited to physical locations, but also includes networks or working mechanisms that allow perpetrators to abuse trust to access public money.

The opportunity structure in embezzlement generally occurs in three main stages, namely deception, abuse of trust, and concealment. Opportunity theories such as Routine Activity Theory (RAT) are also relevant to explain that crimes occur when potential perpetrators encounter suitable targets under conditions without adequate supervision (Benson et al., 2009). For example, in the case of embezzlement, perpetrators may use professional networks to illegally authorize documents or administrative procedures in the absence of strict supervision or auditing. The fraud stage can be prevented by implementing a layered vetting system in contract validation; the abuse of trust stage can be addressed by increasing document transparency and conducting regular internal audits; while in the concealment stage, implementing digital tracking technology can prevent data manipulation. These prevention strategies are designed to make crime more difficult to commit, high-risk, unprofitable, and unjustifiable (Felson & Boba, 2002).

This crime script approach is essential in analyzing local opportunities that enable crimes such as embezzlement so that the resulting solutions can be more focused and targeted compared to an overly broad approach. Through this structured analysis, preventive measures not only provide practical solutions but also improve accountability and transparency in public financial management, while minimizing the potential for future abuse.

### Strategic Recommendations

To increase the effectiveness of prevention strategies, one strategic step is to improve the monitoring system by utilizing technologies such as blockchain to record procurement transactions in a transparent and immutable manner. Blockchain has been proposed as an innovative solution to improve transparency and efficiency in public procurement through features such as immutability and smart contracts that allow for the immutable recording of transactions, thereby reducing the potential for data manipulation (Carvalho, 2019). Stricter regulations should also be implemented to eliminate conflicts of interest in procurement planning and execution, for example by utilizing blockchain technology to reduce third-party interference and ensure data transparency (Agustin & Susilowati, 2019).

In addition, training for public officials on ethics and procurement procedures can help build a culture of accountability. Such education and training are important steps towards improving good governance in government institutions (Batista, 2024). The combination of these measures will not

only strengthen oversight but also increase public confidence in procurement in Indonesia. Blockchain-based technology, particularly smart contracts, provides transparency at every stage of procurement, which is critical to increasing public trust (Ceke et al., 2022).

The measures are formulated concerning international guidelines as well as domestic legal regulations, such as those implemented in Indonesia. The crime script approach can be used to identify critical points in the embezzlement process, allowing policymakers to design appropriate situational techniques to prevent opportunities for the crime to occur. Crime scripts have been used to map the stages of financial crimes, including embezzlement, thus providing strategic guidance to prevent illegal acts (Felson & Boba, 2002). Based on the Situational Crime Prevention (SCP) framework, prevention techniques are applied at each stage of embezzlement to make the criminal act more difficult, high-risk, unprofitable, and unjustifiable, such as the implementation of blockchain to ensure the integrity of procurement data (Weingärtner et al., 2021).

### 1. Fraud

In the context of small-value procurement, where strict procedures are often not applied, embezzlers often use deception by disguising reality, such as claiming a non-existent need to sign a construction contract to access public funds (Benson et al., 2009). Embezzlement usually starts with a seemingly legitimate process, followed by an illegal process, where the perpetrator takes advantage of the access they have gained through their job position. This access often requires only simple actions, such as signing documents or entering data into computer systems, making embezzlement less physically demanding. Preventive measures should therefore focus on restricting access through network management rather than physical premises.

Policy recommendations include applying regulatory theory to oversee government business activities and prevent abuses. The use of policies such as public guidelines for discretionary decisions can help limit officials' room for maneuver in potentially abusive decision-making (Langseth et al., 1997). In addition, measures such as layered attestation or double signature systems can prevent illegal payments (Graycar & Prenzler, 2013). Financial incentives are also an important factor in preventing embezzlement. For example, an increase in civil servants' salaries can reduce the incentive to commit corrupt acts (Langseth et al., 1997).

To make embezzlement less profitable measures such as canceling contracts without compensation when collusion between officials and contractors is found to be effective (Stephens & FAO, 2010). A system of freezing or banning contractors involved in corruption has also proven effective in minimizing future profit opportunities. By implementing strict oversight and compliance measures, violations in contract implementation can be detected, making embezzlement more difficult, high-risk, and financially unattractive.

### 2. Abuse of trust

The second phase of embezzlement is abuse of trust, where an official takes advantage of his or her position to take a portion of a payment that should have gone entirely to the contractor. To prevent these actions, it is important to increase the perceived risk of engaging in corrupt practices by increasing the likelihood of detection. In this regard, the discussion turns to situational measures to increase the risk of embezzlement of public funds. According to Routine Activity Theory (RAT), crime occurs when there are insufficient guards. However, the concept of guards in the context of embezzlement differs from guards in the case of other crimes such as house burglary, as embezzlement often appears legal at an early stage due to the "superficial appearance of legitimacy" (Benson et al., 2009).

Effective safeguards against embezzlement include not only the police, but also civil society, regulation, and compliance programs. One of the key ways to improve oversight is to strengthen accountability and oversight mechanisms for officials with significant influence (Porter & Graycar, 2016). Langseth et al. (1997) emphasize the importance of supervisory systems designed to monitor the work of employees as well as developing internal financial systems to control spending and detect potential violations. Transparency in the decision-making process, particularly in public procurement, is also important to ensure the process is subject to regular and random audits and

checks (Graycar & Sidebottom, 2012). For example, the implementation of e-procurement can increase transparency and reduce reliance on human intervention, thereby minimizing opportunities for conspiracy and abuse (Graycar & Prenzler, 2013; Ware et al., 2011).

In addition, electronic payments also play an important role in limiting opportunities for abuse. With this system, the difference between the amount that should have been paid and what was paid can be detected, making embezzlement more difficult. Electronic procurement serves as a surveillance system capable of preventing financial abuses and acts as a deterrent to perpetrators. To strengthen the integrity of public office, officials involved in decision-making, such as in procurement processes, should be required to make regular financial disclosures, including details of their income and close family relationships (Langseth et al., 1997). For example, in Indonesia, Law No. 28/1999 on Clean and Free State Administration from Corruption, Collusion, and Nepotism requires public officials to report their wealth to the Corruption Eradication Commission (KPK) through the State Officials' Wealth Report (LHKPN), which aims to increase transparency and minimize the risk of corruption (Mahardhika, 2021).

In addition to financial disclosure, there is also a legal obligation to keep complete records of procurement procedures, which can be reviewed at any time. With a combination of oversight systems, transparency in decision-making, open procurement, and adequate disclosure and documentation, embezzlement becomes more susceptible to detection. This increases the chances of convicting the perpetrator once the case is brought to court.

### 3. Concealment

Unlike street crimes where perpetrators try to hide their identity, in the case of embezzlement, concealment is focused on trying to disguise the illegal acts committed. Corrupt officials often collaborate with dishonest contractors to cover up the crime. In this scheme, the contractor still executes the contract as committed, but with a quality that is far below standard. The cost difference obtained through illegal means is used by the official without leaving any indication of legal violations (Al-Rashidi, 2024).

Preventive measures at this stage of concealment aim to reduce the anticipated gains from illegal acts. These strategies are designed to make it more difficult, if not impossible, to disguise the perpetrator. One effective approach is through periodic evaluation of contract performance to ensure that work is carried out according to standards (Graycar & Prenzler, 2013). Compliance programs implemented by government agencies also serve to detect irregularities early by ensuring that contracts are executed according to applicable rules.

To illustrate, the United Nations Food and Agriculture Organization (FAO) in its procurement guidelines emphasizes the importance of monitoring and auditing over the life of the contract to detect suspicious variations, such as changes in contract terms that could indicate corruption (Stephens & FAO, 2010). Another significant step was to authorize the financial supervisor to refuse to disburse the final payment if the work did not conform to the contract specifications. In this case, contract documents are reviewed to ensure all conditions have been met before payment is approved. If conditions are not met, the contractor will not receive payment, so corrupt actors lose their incentive (Graycar & Prenzler, 2013).

In addition, the implementation of whistleblowing mechanisms can make it more difficult to conceal illegal acts. These mechanisms are effective because the public procurement process involves many parties, so some individuals may be aware of violations and can report them. With this mechanism in place, the working environment becomes more transparent, and contract compliance depends not only on the integrity of officials but is also closely monitored under the applicable rules (Benson et al., 2009).

Indonesia provides for the protection of whistleblowers of corruption under Law No. 13/2006 on Witness and Victim Protection, which was strengthened by Law No. 31/2014. Whistleblowers are entitled to legal protection, security, and incentives that encourage their participation in exposing corruption crimes (Rumalean & Saleh, 2021). With the implementation of

measures such as these, embezzlement becomes more difficult to commit, and the risks faced by perpetrators increase significantly.

## CONCLUSION

This paper proposes that criminology in Indonesia can utilize modern theories such as Situational Crime Prevention (SCP) to prevent corruption crimes, including embezzlement. SCP, through the crime script technique, helps break down embezzlement into stages that create certain opportunities. By eliminating these opportunities, the risk of embezzlement can be significantly reduced. This approach offers practical solutions rather than attempts to reform official culture. This research shifts the focus from individual perpetrators and macro explanations towards opportunities for crime, suggesting that embezzlement, like street crime, can be prevented by reducing criminogenic opportunities within government bureaucracies. If perpetrators realize that each stage of the action faces obstacles and a high risk of detection, then they are likely to abandon the plan because the risks outweigh the benefits. In addition, embezzlement can be minimized by making the working environment less favorable to be exploited.

SCP is particularly relevant for preventing white-collar crime because of its rational nature. The threat of detection and sanctions effectively deter actors who have a lot at stake. However, SCP is easier to apply to petty corruption by low-level officials, where the integrity of oversight institutions is more reliable than to grand corruption involving high-ranking officials. The application of SCP in Indonesia underscores the importance of addressing the direct causes, i.e. opportunities for crime, before improving governance or social structures. This encourages a cross-disciplinary approach, for example, involving technology for transaction monitoring or administrative solutions to prevent manipulation. Action-based research, where researchers and practitioners work together to find and test solutions, is an important cornerstone in effectively implementing SCP in Indonesia.

The implications of applying SCP to embezzlement prevention in Indonesia emphasize the importance of focusing on reducing opportunities for crime before improving socio-political structures. This approach encourages collaboration between disciplines, such as information technology to strengthen electronic surveillance and administrative solutions to increase transparency of decision-making. Recommendations for Indonesia include implementing a transparent e-procurement system, strengthening oversight through civil society, and educating public officials on procurement ethics to build a culture of accountability. In addition, stricter regulations need to be implemented to eliminate conflicts of interest and ensure the entire procurement process is well monitored, making fraud more difficult and easier to detect.

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