

1. Title: Call Center Gang Crime: Case Study of Phone Scams in Thailand.

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2. Abstract

The objective of this research article is to study Call Center Gang Crime Case study of current telephone scams in Thailand including phone scams from criminals living abroad. The Measures for prevention, suppression, and notification of incidents when problems arise, from relevant government agencies including mobile phone service providers. The method of data collection from related news research report document magazine articles journal newspapers in Thai or English Information from the Internet website of the National Broadcasting and Telecommunications Commission (NBTC) Royal Thai Police (RTP) Ministry of Digital Economy and Society and mobile phone service providers. An Organizing data and linking various areas of knowledge including the technical aspects of telephone networks behaviors and patterns that call center scammers use to defraud phones or use it as a telephone scam Prevention and suppression measures problems that occur in Thailand.

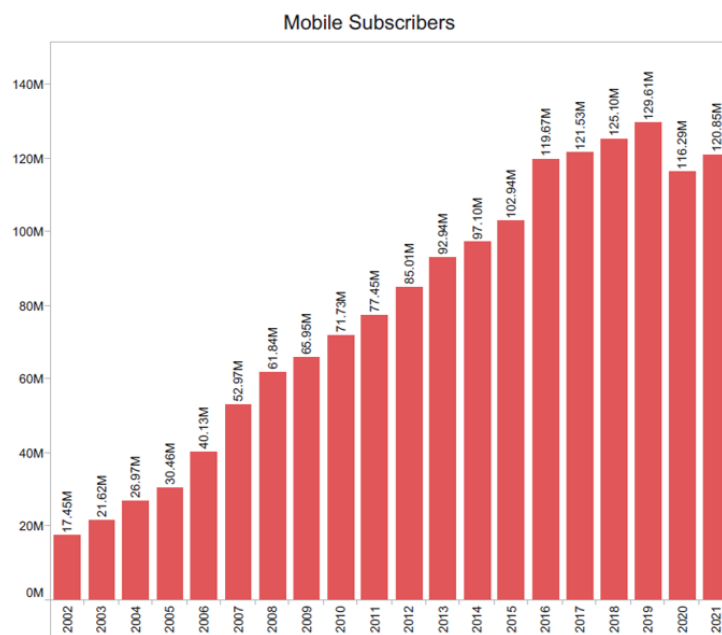
The study results found that scam calls by call center gangs come in many forms for example, claiming to be a bank officer, financial institutions that provide loans postal parcel delivery officer Telecommunications agency staff pretending to be a debt collector outside the system pretend that the victim is lucky and has won a big prize including pretending to be relatives or friends call to talk like we are close friends for a long time and often ask for help with money. In addition, it was found that the telephone system and the technical methods that call center gangs use to make fraudulent calls is a system Voice over Internet Protocol: VoIP assistance, prevention, resolution and suppression from government agencies and service providers according to the role of each organization namely Online reporting check and manage SIM cards crackdown on telecommunications stations illegal signal towers and establish Anti Online Scam Operation Center: AOC etc.

Keywords: Call Center Gang Crime, Phone Scams, Voice over Internet Protocol (VoIP).

3. Introduction

Information and Communication Technology it helps make the lives of people today more convenient able to communicate with each other easily and quickly. It is easier to do activities together. The use of information and communication technology provides benefits in various aspects in terms of education, economy, politics and society, because there is contact through various channels quickly and promptly even though the communicators are far apart even on different continents. Nowadays, there are a lot of technology coming in people use only one mobile phone to do business banking transactions, working online or even when going on vacation can use mobile phone. The mobile phones have many benefits therefore, it is very popular number of registered mobile phone numbers (Mobile Subscribers) there is a continuous growth rate since 2002, there are 17.45 million numbers the highest increase in 2019 was 129.61 million numbers but in 2020, it started to decrease to 116.29 million numbers. It is a period of impact from the COVID-19 pandemic.

Then in 2021, the number of registered mobile phone numbers began to increase to 120.85 million numbers details as shown in figure 1.



Reference: <https://opendata.nesdc.go.th>

Figure 1 Number of registered mobile phone numbers (Mobile Subscribers)

There are many benefits to using a mobile phone it has received high popularity in usage as mentioned above but nowadays it is found that there are many problems from criminals using the phone to deceive in Thailand both the number of times and the value of damage incurred have greatly increased. In 2021, there were more than 6.4 million times, an increase of 270% from the previous year. There are scam SMS increased by 57% a common

method is to trick people into downloading an app. it's dangerous and deceive to obtain personal information.

3.1 Scope of study

From the problem and importance mentioned above therefore interested in doing research on Call Center Gang Crime: Case Study of Phone Scams in Thailand. The scope of the study is on the problem of call center gang crimes case study of telephone scams in Thailand from scammers located in Thailand including scammers living abroad which is the problem of call center gang crimes scam calls are a serious problem. The problem still cannot be completely eliminated although the main agencies involved such as the National Broadcasting and Telecommunications Commission (NBTC) Royal Thai Police (RTP) Ministry of Digital Economy and Society and mobile phone service providers cooperate to prevent and solve problems, arrest or set various measures to prevent the problem of crime from call center gangs and fraudulent calls.

3.2 Definitions used in this research article.

3.2.1 Call Center: An office or business in which employees provide phone support for the customers of one or more companies, or sell or advertise their goods or services by phone.

3.2.2 Gang: A group of criminals or of people, esp. young men and women, who spend time together and cause trouble.

3.2.3 Call Center Gang: A group of fraudsters who engage in phone scams by creating situations to make their victims act out of panic, tricking them into thinking that they will receive certain benefits.

3.2.4 Money Laundering it is to make illegally obtained money legal can be used without being investigated or arrested. This is like turning dirty money into clean money, so we use the word "laundering".

3.2.5 VoIP: Abbreviation for Voice over Internet Protocol: technology that allows people to make phone calls over the internet.

3.2.6 Scams and Scam Calls Deceive is a verb it means using deceitful tricks make it wrong understandable or in legal terms it is the display of false information or conceal truth information which should be stated clearly to make others misunderstand (Royal Academy,2011) when combined with the word phone call therefore it means that using deception to mislead through telephone.

4. Objectives of the research

To study the problem of Call Center Gang Crime: Case Study of Phone Scams in Thailand happening in the present preventive measures, suppression receiving notification when there is a problem from relevant government agencies including mobile phone service providers with the scope of the problem of call center gang crime, case study of phone scams in Thailand from scammers in Thailand, including scammers abroad to be used as a guideline for appropriate problem solving that is more appropriate in the future.

5. Research methodology

The research was survey research conduct research by analyzing data from relevant documents by collecting information from relevant sources including: from the document, research report, articles in magazines, journals, newspapers information Thai or English, from internet websites of National Broadcasting and Telecommunications Commission (NBTC) Royal Thai Police (RTP) Ministry of Digital Economy and Society mobile phone service providers and compile the information connecting knowledge various aspects including the technical aspects of telephone networks behaviors and patterns used by call center scammers to deceive by telephone or use it as a telephone scam, preventive measures, suppression of problems occurring in Thailand.

6. Research results

The research results found that:

6.1 The origin of the call center gang.

Call center gangs are an international economic crime it was once a sensational news and was widespread in Thailand in addition to causing economic damage to a large number of victims it also causes damage to the overall economy of the country. Therefore, this call center gang case is considered a serious transnational economic crime and one case is worth watching especially in the present era this is the information age that communicates in digital form playing an increasingly important role.

Call center gangs are economic crimes profiting from fear and greed and building good relationships with victims or the injured party which has been happening for a long time it's been quite a while but it has been widespread in Thailand since 2007. The victims are usually the elderly and retired government officials have savings or women who are often afraid of deception. The term call center gang or otherwise known as the legal case of call center gang

this is not the first time this has happened in Thailand but it originated from Taiwan at first, the term was not used call center but use the word ATM Game. It is a scam against the people by impersonating someone else. Then deceive the victim into believing it over the phone to have the victim go to an ATM and transfer money to the criminal. There are formats used to deceive victims or victims 2 types: deceive with greed and deceive with fear as follows:

6.1.1 Deception by greed such as deceiving victims into believing that they will receive a VAT refund, win a prize, get a tax refund cheque, etc. claiming that an initial service

fee must be paid it is a service fee and various fees when the victim believes it because of greed for money or property then the money will be transferred to the criminal's bank account Has prepared to open to support.

6.1.2 Deception of fear will deceive the victim that owe debt for telephone, debt on bank card. There are bank accounts involved with drugs bank accounts will be frozen and is inspected by the Anti-Money Laundering Office (AMLO) when the victim believes it and makes a financial transaction as told by the criminal group for example, take an ATM card to make a transaction at an automatic teller machine withdraw cash from own bank account to deposit into a bank account opened by the criminal group which nowadays is deceptive. The method will mostly be used to make the victim feel fearful.

After Taiwanese people initiated the ATM Game scam about 10 years ago later, it was expanded to other countries such as China, Korea, and Japan. and many other countries in Asia including Thailand. There has been an expansion of the Call Center base in foreign countries such as China, Thailand, Vietnam, Malaysia, Cambodia, Laos, etc. Currently, the worldwide damage is several billion baht per year. There is a clear organizational structure division of duties. There is income from fraud by dividing a percentage and having a regular salary in addition to Asian countries that have call center gangs. Thailand still has victims of call center gangs from Europe also come to deceive in Thailand claiming to be a broker let the victims invest in stocks that they believe can make a nice profit or make the victim believe that they will do charity work to help poor countries to the point of deceiving Thai women through email conversations or various online media make the victim feel soft-hearted through building good relationships until finally the victim transfers money to the criminal, etc. It can be seen that call center gang crimes have a deception pattern that is constantly changing depending on the situation. Initially, it started with telephones. Now, it has been developed in various forms, including faxing, SMS, and E-mail. to other online media especially social media such as Facebook where criminals often trick their victims into believing in them or relying on the love of the victim transfer money to scammer.

Actions of relevant agencies to solve the problem of call center gangs that began to spread widely in Thailand in 2007 Including the establishment of a center to suppress call center gangs establish a public service center to prevent people from being tricked into transferring money through online systems. The actions of relevant agencies in August 2010

since call centers began to spread in Thailand in 2007 causing a large number of victims Central Investigation Bureau, Royal Thai Police announced a joint meeting with other agencies such as: Bank of Thailand, mobile phone service providers, various companies including related financial institutions in the story of “Underground Network Fraud” by approving the establishment “Public Service Center to Prevent Being Deceived from Transferring Money Through Online Systems” Initially, the Tourist Police Division's center will be used to be an operations center Anti-Call Center Gang.

6.1.3 Problems caused by call center gangs during the period when they began to spread after 2007

The call center gang is impersonating the AMLO, in March 2011 AMLO) it is reported that there are currently 205 victims of a call center gang impersonating AMLO officers that reported the complaint and there are victims who believe it transfer money to the call center gang total 56 cases the damage is estimated at over 15,000,000 baht usually, Bangkok Bank and Kasikorn Bank are used as money transfer points. The Call center gang tricks victims into investing in fuel stocks. The Department of Special Investigation (DSI), April 2013 it was reported that there was a group of criminals claiming to have opened a joint venture company to invest in fuel stocks and has made telephone calls to deceive Europeans into investing with them when the victim believes it, they will transfer money to them and the call center gang will close the account then escape. The police arrested 9 people British, Canadian and American at the office in Sukhumvit area. It was found that there were victims who were deceived out of more than 100,000,000 baht within 2 years.

6.1.4 Call center gang crimes that is happening in Thailand at present

Current call center gang crimes happening in Thailand it is a process of deceiving victims over the phone by creating a situation that causes the victim to panic or misunderstand that you have received some benefits. The possible damage to victims for example, being tricked into transferring all the money in the account deceived into asking for credit card information for use in purchasing products online, etc.

The Phone call trends and SMS scams worldwide the number of scam calls and text messages worldwide in 2021 was found to be there are 460 million times up 58 percent from last year. In Thailand, there have been more than 6.4 million phone scams in Thailand up 270 percent from the previous year. The scam SMS messages also increased by 57 percent this

type of fraud continues to increase rapidly and it is expected to continue to rise after the COVID-19 pandemic.

The messaging scam there are many because low cost, coupled with reaching the target group or victims at a high rate making scam messages increase every month since 2020 and increased to its highest level in 2021. The scam SMS in Thailand up 57% these messages may lead to access to personal data or loss of property. The people should be more careful when receiving calls from strange phone numbers or send a message especially if the group asks for personal information.

In 2021, scam calls showed that more seamless and higher frequency by call center scammers such as the phone call claiming from the delivery service call center which started to get violent from April 2021 to September-December 2021 and from such deception as a result, victims lost money worth more than 100 million baht, another type of fraud that has been reported by app “Whoscall” users is a phone call that claims from the police alleging that users are involved in crimes such as money laundering, etc. The increasing situation of deceive in Thailand reflecting the global trend of scammers in various countries all over the world use a variety of tactics, such as: Taiwan be affected from stock investment scams due to the booming stock market. Hong Kong, Malaysia and Korea there are scammers posing as prosecutors, In Japan, impersonating an employee of an electric company made a fraudulent phone call to collect maintenance fees for consumers, etc.

6.2 Scams that scammers often use to trick victims online

No.	Fraudster's scam	No.	Fraudster's scam
1	Online sales scam.	8	Send fake links to hack a personal information steal phone data, bank accounts.
2	Call center gangs intimidate and cause fear.	9	Pretending to be someone else to trick people into giving personal information, Important information such as OTP code, information on the back of the ID card.
3	Online loans, brutal interest rates.	10	Fake Line or Facebook account and borrow money from the victim.

4	Online loans that don't exist	11	Creating fake news, Violating the Computer Act. (Make sure before sharing)
5	Various investment scams with high returns/that don't exist.	12	Deceiving people into taking nude photos for blackmail purposes.
6	Tricking people into gambling online.	13	Advertisements encourage people to work abroad and then force them to work illegally.
7	Create fake profiles to trick people into falling in love and then trick them into transferring money or investing. (Romance Scam-Hybrid Scam)	14	Trick into consent for others to use bank accounts participating in the crime Fraud, Money laundering.

6.3 Scam calls

6.3.1 Fraudulent call behavior of call center gangs related research by Torsin Tuncharoen¹ and Somphong Assawaboonmee² “Call Center Scammer Problems” said it was a scam call it means a fraudulent call that is, impersonating a person or legal entity to steal the victim's property or identity. Therefore, it can be concluded that scam calls are fraudulent by using deception and fake identity with fraudulent intent to obtain the property or identity of another person. The scammers' methods of deception often create situations to make the victim feel shocked fear, anxiety or feel excited, happy to cause the membrane to lose consciousness in thinking. The scammers persuade victims to transfer money into their accounts. They often pose as officials of the agency or representatives of reputable companies in all situations, the perpetrators will set a short time frame to rush victims into taking certain actions without giving them time to think or check the information first, such as: impersonating a bank officer to deceive that the victim's bank account will be frozen within 2 hours because it was found that this account was involved in illegal business and trick the victim into transferring money or deposit money login via Automatic deposit-receiving machine (ATM/CDM) Claiming to use the money for an audit or to cover related costs.

6.3.2 Summarizing the tricks of the call center gang

(1) Claiming to be an official of a bank or financial institution for example, pretending that the victim owns an account that will be frozen because it is involved in illegal business then inform that you need to transfer money out of the account for the officer to verify and show your sincerity before the account has to be frozen including sometimes advise victims to verify their identity unlock account at an ATM transfer money out of the account accidentally because it is an English menu that the call center gang tricked into making a transaction.

(2) Claiming to be an official of a postal service company which often deceives that there is a delayed parcel even though the victim reported that there is no waiting list to receive any packages they will claim that there may be ill-wishers using personal data to deliver illegal parcels Therefore, there is a parcel freeze then trick the victim into reporting to the police station citing the name of a provincial police station where the victim was inconvenient to travel then offer help by transferring the call to speak directly to a police officer which is a fake policeman. The fake policeman investigates, threatens, and tell to transfer money from bank account to fake police account immediately otherwise the account will be suspended

(3) Claiming to be an official of a telecommunications agency by deceiving that the victim's phone number will be suspend use by National Telecom Public Company Limited or the National Broadcasting and Telecommunications Commission (NBTC). When the victim believes it, they ask for personal information, claiming that they will use it to verify that their service is not suspended.

(4) Presence as a creditor debt collection outside the system by deceiving the victim or someone close to the victim that has a large amount of debt outside the system and threaten the victim to transfer money to pay off the debt if not followed will to harm or humiliate.

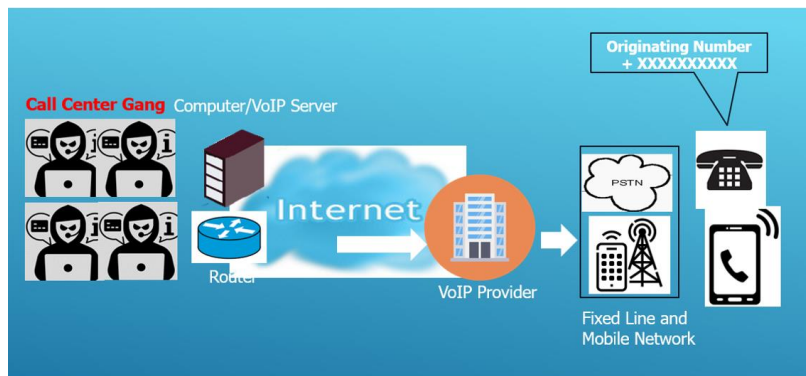
(5) Claiming to be an official of the Revenue Department inform the victim to verify their identity to get a large tax refund by verifying identity via an ATM make an English menu that the victim does not know English and lack of observation that it was a transfer out of the account.

(6) Claiming to be a loan officer of a financial institution provide loan credit deceive that can get a loan approved quickly request the victim to transfer money for the fee to be used for the operation.

(7) Deceive the victim into believing that they have won a big prize or are lucky notify to pay taxes to receive prizes.

(8) Call to talk, create intimacy deceive to be a relative or close friend request financial help.

6.4 Telephone systems and technical methods used by call center gangs to make fraudulent calls.

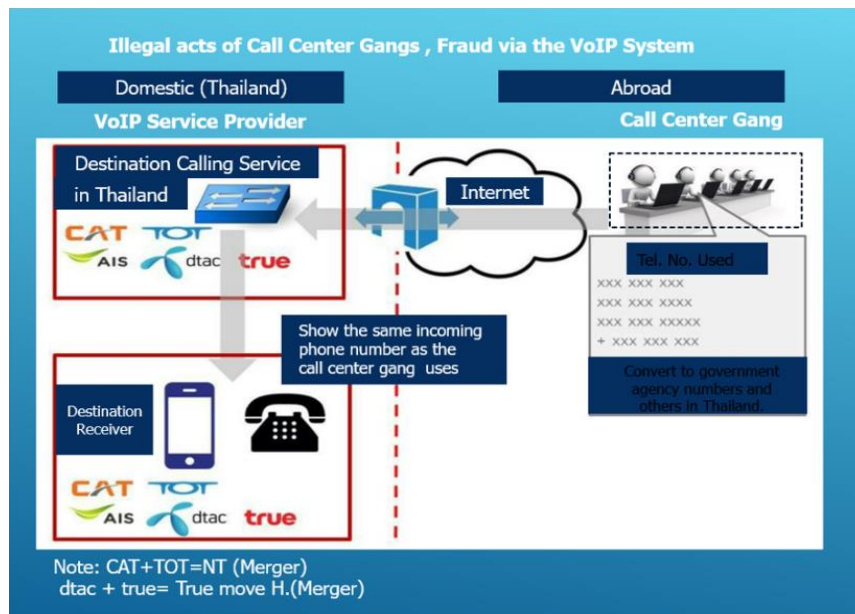


Reference: Journal of Digital Communications. (Edited by researcher)

Figure 2 Telephone systems used by call center gangs to make fraudulent calls.

Telephone Voice over Internet Protocol (VoIP) system call center gangs choose to use it to make fraudulent calls to the public. In this case because they want to conceal their true location creating obstacles to tracking, arresting and prosecuting source number spoofing (Caller ID spoofing) build credibility to fool victims by forging various numbers of both government and private agencies.

6.5 Conduct of an offense of the call center gang, fraud via VoIP system



Reference: <https://www.prachachat.net/ict/news-100440> (Edited by researcher)

Figure 3 Show conduct of an offense of the call center gang, fraud via VoIP system

Misconduct patterns of call center gangs all used VoIP internet calling by setting the destination number to be the same as the number of important Thai government agencies or the telephone numbers of senior executives of the Royal Thai Police, Anti-Money Laundering Office, Revenue Department, and Customs Department. The most of these telephone numbers are disclosed on the official websites of the respective agencies. Therefore, it is easy for people to believe it details as shown in Figure 3. This method, when people check the incoming call number, they will find that it is the real number of that government agency. Therefore, it is easy to believe it when the scammer request to transfer money given various reasons, they believe it resulting in losing a lot of money in fact, it is a fake number that was intentionally set up in the system from the origin abroad. It's not really a call from that

agency. The original VoIP service format related telecommunications service providers, including internet gateways and mobile phones the incoming call number will be displayed to the recipient as set by the sender,

because didn't think there would be anyone with malicious intent. The VoIP technology allows users to set their own preferred phone numbers to be displayed to their destinations. Therefore, it becomes an open channel for deception, so as a short-term solution the NBTC will cooperate with 6 related telecommunications service providers including TOT, CAT Telecom, AIS, DTAC, True Move H and 3BB block all incoming calls to Thailand from VoIP services that display fake numbers (this time, there are 52 numbers) according to information immediately received from the Royal Thai Police and will increase the number blocking as continuously notified. Since the Royal Thai Police established a center to provide services to citizens to file complaints and suppress call center gangs on December 8, 2017 found 167 victims there have been 52 phone numbers used to impersonate government agencies to deceive people.

The police therefore notified the NBTC to coordinate with 6 service providers to block all numbers immediately to prevent further victims, as for the medium-term measure, 6 service providers will develop a central system and create a common database, so that every time a VoIP number calls into Thailand unable to display number as set up anymore but the number that was assigned must be displayed to be able to check back when a crime is committed.

The next target is within 2 months after blocking the first batch of 52 fake numbers VoIP calls will show the source number as required cannot be done but must show the number that was assigned is a specific category to be able to identify that it is a service that is used through the network of which service provider for example, if using TOT's network, the number would be 02 xxxxxxxx if this number is used will know that you have to check back at TOT.,

to verify that call from which country which will easier search for lawbreakers. As discussed together all entrepreneurs are welcome to join in investing in system development without charging any fees. The NBTC has issued a warning message to consumers to be careful of call center gangs let entrepreneurs distribute it further as well by emphasizing that consumers should be mindful don't believe it, do not provide personal information, check information, cancel answering phone calls, call the police or relevant agencies because there is no government agency will call and demand money.

6.6 Assistance, prevention, resolution and suppression from government agencies and service providers.

6.6.1 Receiving notifications with the police online.

The Police Cyber Taskforce, Royal Thai Police prepare to facilitate the people reporting to the police online to get back lost money by the victim must contact to submit the case by themselves by sending damage data through the LINE application. The victim used

the online reporting service up to 300 cases and there is a trend of the number will continue to increase.

It is easy and convenient to do it can report it anywhere where the staff is an admin to provide service and link data of litigation that are quickly related. In addition, victims can also follow the progress of the case via the online system or can ask questions to staff 24 hours a day.

The steps for requesting assistance from the Technology Crime Suppression Center.

- (1) Press the add friend button and enter the chat channel.
- (2) Contact the LINE official and report any information.
- (3) Capture the screen of the conversation with the scammer.
- (4) Send it to the official to check.
- (5) The officer will coordinate with the agency to accelerate problem management.

The statistics of online complaint from the Royal Thai Police in cybercrime cases Period: 1 March 2022 - 30 June 2024 more than 575,507 cases. It was found that 'working age'

the most scammed into transferring money for the elderly group, the number is less than 10% which reported online via the website www.thaipoliceonline.go.th the value of damage totaling more than 65,715 million Baht average daily damage is more than 80 million baht, from the above statistics, it was also found that: The majority of victims were women, 64 percent and 36 percent are men which is of working age. An online reporting statistic by age group are as follows:

- Age group 11 - 14 years: 0.12 percent
- Age group 15 - 17 years: 0.78 percent
- Age group 18 - 21 years: 6.22 percent
- Age group 22 - 29 years: 25.33 percent
- Age group 30 - 44 years: 41.51 percent
- Age group 45 - 59 years: 19.62 percent
- Age group 60 years and above: 6.42 percent

6.6.2 Require multiple SIM card holders to verify their identities.

National Broadcasting and Telecommunications Commission (NBTC) order SIM card holders with more than 6 phone numbers to verify their identity cut off channels for fraudsters to deceive the public. The measures of the NBTC requires holders of multiple SIM cards (6 or more) to verify their identities. It is effective from January 16, 2024 because SIM cards are an important device for criminals especially call center gangs must have them and use them to commit illegal acts whether it's calling the victim, sending a message or SMS, attach a link, transfer money via internet banking, together with telephone signal and internet. The NBTC therefore focuses on organizing SIM cards especially prepaid numbers that does not have real user registration or register with incorrect, incomplete and current information. Therefore, an announcement is being issued regarding identity verification measures and

information about the use of mobile phone services of mobile phone users with the following important content:

(1) Holders of 6-100 SIM card numbers must verify their identity within 180 days.

(2) Holders of 101 or more SIM card numbers must verify their identity within 30 days.

If the person holding the SIM card does not verify their identity as scheduled will be suspended, calls and internet usage will be blocked except for emergency calls and there are 30 more days If have not verified identity the use of the SIM card number will be revoked all in possession.

The first phase will start with holders of more than 101 numbers due to its shorter processing period and it is expected that such measures will not affect the majority of users because there are approximately 300,000 users in the network who need to verify their identities it represents 0.5 percent of the total number of users on all networks. For such measures. These additional measures to prevent the work of fraudulent groups from the existing 7 measures.

An additional measure such as, blocking incoming international calls in the form that criminals regularly use or unknown source, add Prefix +697 and +698 in front of the number for incoming calls from abroad via VoIP and roaming respectively, providing the service *138 rejects international calls, set up a registration system for those sending messages to a large number of recipients. limit on the number of SIM card registrations and cancel sending of some types of SMS with attached links, etc. The operation in conjunction with sweeping and arresting illegal radio communication stations and sources of illegal radio communication equipment including organizing signal poles along the border ff licensed operators. It will also help the investigation process to expand to the perpetrators more efficiently because when it is determined that SIM holders with a large number of SIMs verify identity to know the real user and the number that has no one to verify its identity it was eventually suspended and revoked from the system because it may be in the possession of criminals, for each mobile phone service provider will be the developer of the registration format and method for identity verification to facilitate their customers and have a duty to notify SIM holders which hold many SIM must come to process within the specified time period by having the least impact on honest users.

6.6.3 Order to turn off the SIM card of the SIM card holder who has not verified their identity.

National Broadcasting and Telecommunications Commission (NBTC) subcommittee on Integrating Guidelines for Enforcement of Telecommunications Technology Crime Laws and State Security it is reported that after the measure to verify the identity of SIM card holders from 6-100 numbers due on July 13, 2024 will start suspending 2,141,317 numbers that are not registered both call blocking, sending a message and internet usage but still able to receive incoming calls for a while according to the criteria of each service provider, it is approximately 30-45 days before being revoked and the number being returned to the NBTC. However, it is believed that 2-3 weeks after the suspension there will be many service users

coming to confirm further same as the first group, which 101 or more numbers have been suspended, a total of 1,096,000 numbers. The measures to verify SIM name does not match the mobile banking account NBTC received information from a total of 21 banks. through the Anti-Money Laundering Office total of 113,568,836 accounts. There are approximately 79-80 million numbers that are subject to investigation which is in the process of checking and separating the network before sending to each mobile phone service provider compare the SIM card owner used for online transactions with the bank account owner which will be completed within September 2024.

6.6.4 Sweeping away illegal telecommunication stations and signal towers.

NBTC and Royal Thai Police crackdown on illegal telecommunications stations and signal towers along the border which call center gangs use to deceive Thai people into using internet signals and mobile phone signals distribute signals from the Thailand, illegally setting up radio communication stations distributing mobile phone and internet signals beyond the Kingdom of Thailand, arrest of radio stations and illegal signal towers at Sa Kaeo Province. In the past, it was found that there was illegal transmission of telecommunication signals and the internet to neighboring countries which is part of the technology crime problem especially call center gangs and online gambling websites. It is a major problem in Thai society today the nature of the illegal acts is as follows:

- (1) Installing a radio telecommunications station without permission and turn the antenna direction towards neighboring countries which has an offense under Sections 6 and 11 of the Radio Communications Act and the offense of operating telecommunications businesses which must obtain a type one license without permission pursuant to Section 67 (1) of the Telecommunications Business Act
- (2) Installing mobile telephone base stations and pointing the antenna towards neighboring countries this allows mobile phone signals to cross into neighboring countries as a result, the service area of telecommunications business operators beyond the territory of Thailand and encroached on the territory of neighboring countries NBTC informs all telecommunications business licensees to urgently correct, improve or comply with the law by dismantling some antennas or adjust the antenna direction or proceed in any other way do not broadcast radio frequencies outside of Thailand to ensure that the service area is within the territory of Thailand.
- (3) Cancellation of mobile phone SIM card registered with a name that does not match the actual user.

NBTC and Cyber Crime Investigation Bureau inspect found sale of registered mobile phone SIM cards using another person's name, not the actual user for sale to other persons (found at Rong Kluea Market, 50 numbers) therefore, it was inspected and seized such SIM card and take legal action against SIM card sellers which is an offense under the Technology Crime Prevention and Suppression Act it has come into force.

6.6.5 Establishment Anti Online Scam Operation Center: AOC

Ministry of Digital Economy and Society Has been established Anti Online Scam Operation Center: AOC starting from Monday, November 1, 2023, service is available 24 hours a day. Organized to receive public complaints about online crime problems, problems from call center gang crimes and including fraud online trading as well service type one stop service to integrate prevention and suppression of online crimes, Suspend and freeze bank accounts immediately to enable blocking operations freeze accounts for citizens immediately within 1 hour. The data will be stored using the Cloud Service system which is the central cloud system of the Ministry of Digital Economy and Society to the highest safety standards and the Personal Data Protection Act.

The goals of AOC 11441 are as follows:

- (1) Suspend/freeze the criminal's account to help victims/victims of online fraud immediately.
- (2) Follow up on the status of problem resolution providing victims every step of the way.
- (3) Accelerate the return of money to victims.
- (4) Increase efficiency in arresting, prosecuting and expanding cases using digital technology assist with data integration and immediately work with all relevant agencies when notified by the victim.

AOC 11441 Service Capability

- (1) The telephone numbers, originally 20 numbers, has been increased to 100 numbers.
- (2) Receive complaints about problems caused by crimes from call center gangs and including online trading fraud.
- (3) Working hours 24 hours a day
- (4) The number of online trading fraud cases is more than 133,000 in a period of 1 year and 7 months.

7. Conclusion

Summary of results, from the study according to the research objectives, it can be concluded that nowadays, telephone system technology is very advanced especially the usage Voice over Internet Protocol: VoIP easy to use, can set up various usage settings such as setting caller ID. convenient and cost-saving there is a wide service area can be used anywhere with access to the Internet. The causing criminals to use features of VoIP technology. It is a tool to make scam calls causing damage to the victim, to Thailand and other countries overall, a large number interception or elimination it is still difficult and takes time because criminals are trying to change the pattern avoid being arrested and there is an incentive that each scam takes a large amount of money from the victim. This is why scammers continue to seek opportunities and methods to deceive. The problem solving that happened in Thailand Still can't solve it effectively. Therefore, to be able to solve problems

more effectively, relevant government agencies, including telephone service providers must cooperate closely and continue and may need to consider other additional methods to block fraudulent incoming calls from overseas causing distress and damage in Thailand.

8. Suggestions

The call center gang crime telephone scams in Thailand causing a very high value of damage. It is a threat to people's privacy. The problem still cannot be completely eliminated and there is a tendency to develop the use of technology and more complex methods of deception. Therefore, I would like to suggest as follows.

8.1 Interception of fraudulent calls by cracking down on the establishment of illegal telecommunication stations and signal towers or making mobile phone signals and internet cover service areas beyond the Kingdom of Thailand the main agencies are the NBTC, the Royal Thai Police, and telephone service providers must be strict, cooperative and continuous.

8.2 The control of identity in SIM card registration must be strict and verifiable.

8.3 Banks must enhance online transaction security and take responsibility in the value of damage from deception and the protection of personal data.

8.4 The government agencies that have been established to receive reports and help solve online crime problems 24 hours a day, integrated services. It is considered useful and it's a good principle but there should be monitoring and evaluation of service efficiency to maintain quality in service forever.

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