Research on Investigation Strategy of Telecom Fraud Crime in Big Data

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Abstract: In recent years, the development of communication industry is speeding up. More and more non-contact telecommunication frauds are used in various means of communication and online payment technology, which brings people a lot of troubles. This kind of case is mostly committed in a cross provincial way, involving a very wide range, the object is not fixed, so it is very difficult to solve the case. The crime of telecommunication fraud covers a wide range, has a bad influence on the society, and has difficulties in investigation. In view of the difficulties in the investigation of telecommunication fraud cases, it is very necessary to make full use of big data technology. Taking the telecommunication industry as the focus of investigation, this paper proposes investigation strategies by analyzing the big data technology used in telecommunication data. This paper focuses on the investigation strategy of Telecom fraud cases under the background of big data.

1. Introduction

The so-called telecommunications fraud is to make full use of the current cash communication tools, especially the continuous upgrading of network technology, become the main communication mode used in telecommunications fraud, send false information to non-fixed objects, and guide the behavior of deceiving objects to transfer money to their own accounts. This kind of fraud belongs to the kind of financial fraud, this kind of crime is various, the coverage is very wide, even exists the inside and outside collusion behavior, seriously harms the society. In view of the difficulty of investigation, the application of big data technology can achieve good results.(Figure 1: Telephone fraud)

Figure 1 Telephone fraud

2. Basic Information can be Obtained by Applying Big Data Technology in the Detection of Telecom Fraud Cases

At present, the fight against telecom fraud has begun throughout the country. The application of

big data technology has provided an effective tool to combat telecom fraud, which has important value in the fight against telecom fraud, especially in the form of telecom fraud has been intelligentized, the crime has become worse, and has formed a group crime, and even become internationalized, which requires the use of big data technology to strengthen the big data collection work, using advanced work to solve telecommunications crime cases. The application of big data technology can quickly and accurately obtain the information of criminal suspects, which can provide the relevant information of telecom fraud crime, which is the key to the success of cracking down on telecom fraud crime. The application of big data technology can effectively prevent the criminal activities of telecom fraud, and it can also provide clues to combat the criminal activities of telecom fraud, so that the investigation of cases can find the right direction [1]. Specifically, the data information reflected by big data is related to the crime of telecom fraud, and all the elements such as people, things, time and space can be accurately provided, and all the information closely related to criminal activities can be clearly reflected. The main function of big data technology is to collect information, excavate and arrange the valuable information, transmit the information to the professional, and the professional will study the information, and extract the relevant information from the telecommunication fraud, and the regular characteristics of the telecommunication fraud crime can be revealed, Figure 2: Online Customer Service Phone Fraud)

Figure 2 Online Customer Service Phone Fraud

Big data is the process of finding new information by concentrating a large number of scattered information related to telecommunications fraud, and after analyzing and comparing, the valuable information is recombined. The information of different sources and different levels of information is grouped together, in which the information has different accuracy, and the most useful information can be screened out by using big data technology to carry out systematic research to form relatively complete, accurate, hierarchical and in-depth suspect information. To study the data of telecommunication fraud crime from the common point of view, it is to study its characteristics; to predict and further analyze the data of telecommunication fraud crime, to fully grasp the data of telecommunication fraud crime, on this basis, to use the method of combining qualitative analysis and quantitative analysis, to make an accurate judgment on the law presented and the characteristic of telecommunication fraud crime, and to make a prediction of its next step behavior; to innovate the information, according to the characteristics of telecommunication fraud crime, according to the characteristics of telecommunication fraud crime, to integrate the statistical classification of telecommunication fraud crime from different sources, to create new practical information of telecommunication fraud.

Big data analysis aims to crack down on telecom fraud crime. According to the results of various investigation activities, the investigation logic analysis method and creative thinking method are used to deeply analyze and study the situation of telecom fraud crime. The most valuable information is extracted by using the big data technology collection function, extracting the fraud crime material, eliminating the false information and identifying the newly generated information after weighted processing. The research on the information of telecom fraud crime can predict the further development and the change of telecom fraud crime, according to the feedback information of butterfly in investigation practice, it should be considered and evaluated. The analysis of big data

technology is to collect and collate the data of telecom fraud crime, and also to store and retrieve the information automatically, which is also the basic premise of the application of telecom fraud crime data information, which plays an important role in the fight against telecom fraud crime [2].

3. Taking the Telecommunications Data as the Breakthrough in the Investigation

From Current Telecom fraud crime Use of Means Analysis, network telephone Is more commonly used, in addition to making phone calls, but also texting, crime high-tech, make Public security organs Arresting fraud suspects When, there is a great difficulty. Newsletter Tools provided Information Whether it is true or not requires sufficient evidence to be confirmed Telecommunications data Investigation and detection, if the information is wrong, it is likely to break The case is misleading. Fraud crime is widespread, there is no regional, but the use of cross-regional crime. Information technology brings a lot of convenience to people's life, crime analysis will also use this convenience to commit crimes, there are different crime in different regions and different crime teams, different levels of operation skills, if still adopt the traditional way of solving cases, it is difficult to find a breakthrough, in the big data era, it is very necessary to make full use of big data technology. The specific investigative strategies are as follows.

3.1 Application Of Big Data Technology From People To The Investigation Of Cases, To Do Active Attack

The best way to combat and prevent crime is to take the initiative and pre-empt it. When a telecommunication fraud gang commits a crime, it usually uses the method of calling or sending a group of text messages, which will lead to a sharp increase in the number of mobile base station communication data in a certain area. In this case, the big data of telecommunications will be formed. At this time, the public security organs should ask the telecommunication department to cooperate with the investigation, so that they can grasp the information related to the case in a timely manner, locate the suspect in a short time, and find out the criminal gang [3]. For example, shandong province has cracked similar cases, is to cooperate with the telecommunication department, comprehensive understanding of the crime information, mainly found that individual telecommunication base station network abnormal situation, at this time suspected of malicious mass text messages, or automatic dialing is suspected. After the two sides cooperate to further investigate and control the suspects, the police beat down two telecommunication criminal gangs, used malicious dialing software to dial a large number of mobile phones in other places, sent false information about the winning of the prize by text, and defrauded the other party of various fees, which is the usual method of the two groups, Figure 3: Big Data Case System)

Figure 3 Big Data Case System

3.2 Application of Big Data Technology Telecommunications Account Opening Information as the Main Breakthrough Conduct of Investigations

Check the name and ID number of the telecommunication account holder. At present, our country has basically adopted the mobile phone number real name system, but in need of my

identity to open an account business hall registration, criminal suspects usually use false identity card to open an account, use this way to steal other people's identity card information, register mobile phone and use it. If the public security department, in cooperation with the telecommunications department, can inquire about the information of the telecommunication account opening, the personal information of the head of the household can be obtained, and if the number of the bank account opening can be inquired about whether the identity card is myself, the public security organ can also collect the information resources of the hotel accommodation and the information of the temporary residence permit, so that the criminal suspect can be located accurately and the related behavior can be understood.

3.3 Will Letter Open the Surveillance Video Come out

Access to surveillance video information can be obtained from the relevant information, the number of people, any physical characteristics can be obtained. Traffic equipment used by suspects can also be reflected by watching surveillance footage of the location where the accounts were opened. After obtaining the license plate number of the suspicious vehicle through the surveillance video, if it is a taxi, it can retrieve the CPS data information related to the vehicle, get the location of the suspected vehicle and the distance of the driving, and ask the taxi driver for the relevant information of the passengers; if it is a self-driving vehicle, it can also query the traffic video information to describe the formation route of the suspect. The suspect's path is accessible through the vehicle information system [4]. If there is a phone call in the surveillance video, you can ask the technical department to dial the phone number and the transmission of voice and text information to obtain the suspect's criminal clues.

4. Conclusion

Through the above research, it is clear that the crime of telecom fraud is a new form of crime, and the difficulty of detection is relatively large. The current incidence of telecom fraud shows a high trend, the use of big data technology for detection, can improve the efficiency of detection. In the investigation of specific cases, the active cooperation of relevant departments is needed to collect evidence and find clues. The method of using big data technology to carry out investigation is different from that of traditional law breaking, and the investigation strategy based on this is helpful to improve the efficiency of case handling.

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