

Pattern and Prevention of Facebook Shopping Fraud

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Abstract- New gimmick of fraud case appears in the recent year, as era progresses, it evolves as well. According to National Police Agency, Ministry of the Interior, 165 anti-fraud counsel's statistic shown: Fraud committed through social media (Facebook) is higher than auction website and has become the fraud ring's favorite. From January to November, 2017, 4,275 cases of fraud have been committed. Regardless of government's propaganda continuously reminding people, Facebook is just a social media and not shopping website, many people still uses Facebook to shop and become the victim of the fraud. Qualitative research method-semi-structured interview is used in this study, we divided Facebook fraud into, one-page advertisement, Facebook group buying, used item exchange, live online streaming etc. and interview both victims and officers to seek for ways to prevent fraud from happening. Research shown: Group buying or used item exchange uses rare item or price difference to attract victim. Then use common interest to gain their trust and led victims into the trap; one page advertisement uses pictures of celebrity or altered the news that victims believes it is used by celebrity or on the news and made the purchase. Victim usually don't report the fraud to the police, instead, they take the matter into their own hand and more serious crime is committed as the result of it. The difficulties are police has many cases on hand and are committed in different ways. They are unable to gather enough information and look deeply into each case. Many cases are committed internationally and it is hard for the local police to solve the crime on their own. As the result, the public has negative impression that police are not seriously about solving the crime. The most effective ways to prevent Facebook fraud is to enhance Facebook user's common sense on fraud and what to do if an user has become the victim of a fraud. Also work with popular social media group to publicize about fraud prevention and enhance the trust of the public towards the police solving the crime. Simplify the step to report a fraud and organized online fraud case from every cities and counties and restore judicial cooperation between China and Taiwan.

Keywords: Facebook shopping, fraudulent crime, prevention and control measures, investigation action

I. INTRODUCTION

1. Research Background and Motives

With the development of science and technology and the fierce competition among telecom operators, the previous tariff scheme for telecom operators was designed on the basis of "making phone calls first, followed by surfing on internet". In recent years, it has changed to "surfing on internet first, followed by making phone calls". Because of the fierce competition, the industry has even introduced a zero-dollar smart phone scheme, making smart phones more popular in Taiwan. Facebook was founded in 2003, and in June 2008 it introduced simplified Chinese version for Chinese users and traditional Chinese versions for Taiwan and Hong Kong markets respectively. According to the latest data, the number of active monthly users in Taiwan has reached 18 million (The Epoch Times, 2016). The popularity rate of mobile phones and the low rates have made consumers free from time and space constraints to place orders online at any time. Online shopping has gradually become a trend. The huge population of Facebook users also brings huge business opportunities. Through the analysis of big data, users' interests and hobbies can be accurately grasped. Many e-commerce platforms also solicit business through Facebook advertisements. Most of these websites boast easy ordering, cash on delivery, easy operation and quick delivery, which indeed have their charm. There are even teaching courses on Facebook advertisement placement for Facebook business opportunities, which teach people to learn to use Facebook advertisements, conduct analysis of netizens behaviors, search for network intelligence, make traffic advertisements, select audience tags, and offer courses such as setting, selecting and tagging of advertisement audiences. This shows that Facebook's business opportunities are thriving. The rise of e-commerce has resulted in a lot of consumer disputes and fraud cases. Therefore, the research motive of this paper is to discuss the types of shopping fraud in Taiwan's Facebook and analyze various factors necessary to investigate and handle such cases in the future.

2. Research Questions and Purpose

There are still differences with Facebook shopping fraud, online shopping fraud and telecom fraud

There are still differences in Facebook shopping fraud and online shopping fraud or the telecom fraud or cross-strait fraud crimes in the past. Facebook is a social platform, and victims are usually cheated through the offender's guidance of private contacts. Many of the one-page advertisements are from Chinese sellers who have jumped over the wall and trade on other overseas websites through Facebook as an advertising medium. They are not under the supervision of online shopping operators. Through Facebook pulling groups or second-hand transactions, live webcast is another method. The comparison between Facebook shopping fraud and current emerging fraud cases is as follows:

Category	Network auction fraud	Facebook fraud	Telecommunication fraud
Interface properties	Shopping platform	Social platform	Telephone number (personal data leaked)
Number of victims	Ranks the second place	The highest	Low
Average property losses in individual cases	Low	Low	Huge
Number of perpetrators	Usually 1,2 people, unorganized	<ol style="list-style-type: none"> 1. Second-hand trading or group buying - usually 1,2 people, unorganized 2. Facebook live broadcast - variable number of people, smaller scale 3. One-page advertisement - small organization but almost cross-border 	Large organizing, in groups and even crossing borders
Fraud method	Shopping (no delivery, fake goods) or personal property leakage leading to telephone fraud	Shopping (fake goods (counterfeit goods), worthless goods (do not match with pictures and texts)	Fake tax rebates, fake official documents, fake kidnapping tickets, fake police, etc. to create panic among the victims.

Table 1-2-1 Comparison of Online Shopping Fraud, Facebook Fraud and Telecom Fraud

This paper discussed the network usage habits, online shopping usage history, shopping types and fraudulent methods of these victims of Facebook shopping fraud, qualitative interviews with victims and criminal police investigating such cases were used to sort out the patterns of Facebook fraud and put forward suggestions so as to provide the general public with reference to the judgment of using Facebook

shopping and provide the basis for the investigation and prevention mechanism of Facebook fraud. The purpose of the research is summarized as follows:

(1) Discussion on the psychology and deception history of abandoning the regular shopping platform and switching to Facebook shopping: the online shopping experiences of Facebook victims of shopping fraud, methods of fraud and subsequent treatment are analyzed and discussed, and common forms of Facebook shopping fraud are summarized.

(2) Police's investigation attitude and current difficulties in investigation: as far as we know, most of the victims of Facebook shopping fraud have not reported the case, why do the victims give up or do not want to report the case or does the police not accept the report? Once the case is established, what are the police's follow-up investigations and the current situation of investigation? The police, who are responsible for investigating and handling such cases, compare the victim's course of deception to provide the general public with reference to the judgment and prevention mechanism in the future.

II. LITERATURE REVIEW

The description of online shopping behavior of Kuan (1996): consumers order online through online advertisements, either directly or after advertisements in other online media.

Castells (2009) indicated that under the information revolution, a global criminal economy has emerged. Criminal groups distributed in different regions use economic globalization, new communication and transportation technologies to carry out transnational criminal activities and form networks through cooperation with criminal groups in other regions.

Newman and Clarke (2003) suggested that the high anonymity of the internet makes it impossible to distinguish the real identities of the two parties to a transaction. It is also common that numerous disputes occur because no oral or written contract has been drawn up face to face. In addition to the anonymity, the difficulty in detection, being easy to escape, anonymous and other characteristics are all the reasons why various internet platforms are prone to fraud.

Cox (1967) mentioned that most consumers are aware of the risk when shopping. When shopping in a virtual store, consumers have relatively high cognitive risk about virtual store shopping because consumers lack the opportunity to directly contact products. In fact, Facebook is not a shopping store, but a social platform, so most of the victims lose their guard.

III. RESEARCH METHOD AND DESIGN

The purpose of this study is to explore the patterns and prevention of Facebook shopping fraud. Researchers adopted qualitative research perspectives and methods. Taking Facebook shopping victims and criminal police as interview samples, we collected and analyzed data through in-depth interviews, hoping to understand their views on Facebook shopping fraud cases, and further summarize the patterns of Facebook shopping fraud cases and propose prevention and control suggestions.

1. Research Method and Procedures

The purpose of this study is to explore the history and pattern of Facebook shopping. If quantitative research is adopted, it is difficult to collect a large number of samples, and each victim's shopping and victimization history is different, it may not be able to properly answer the questionnaire questions, nor is quantitative research able to further explore the victim's perception of fraud cases. Although qualitative research samples are less than quantitative research, they can provide rich description of the research phenomenon. Through the interaction between researchers and research participants, more research results and discoveries can be obtained. Therefore, researchers adopted the qualitative research method as the research method of this study.

2. Research Subjects

The research subjects selected by the researchers were divided into victims and criminal police. The online shopping users who had been deceived were invited as the victims to participate in one-to-one in-depth interview. In the criminal police part, we hope to understand the current situation and difficulties in the investigation of Facebook shopping cases from the perspective of the police who actually investigate such cases. The research conducted by the researchers through in-depth interview can obtain more data and enrich the research quality.

The method used by the researchers in this research is snowball method or chain sampling. Using snowball method, we can find key informants or key cases with a large amount of information. In conclusion, in the victim part, the researchers first asked colleagues who are familiar with online shopping and Facebook community operation mode to inquire about their friends in the community and around them. One of them was once an online buyer and a seller, and is very skilled and experienced in online shopping and can be used as a participant in this research. The second interviewee is active in various Facebook communities and owns her own Facebook community to sell goods. Therefore, she was invited as a participant in this research. The third respondent is keen on the kitchen category and child care appliances and has participated in group buying several times. She has a certain understanding of the operation of large-scale communities, so she was chosen as the third participant in the study. The basic information about the victims of the study is as follows:

Basic Data Sheet of Victims of Facebook Shopping Fraud Cases

Case No.	Age	Educational level	Occupation	Marital status	Number of Facebook shopping fraud cases	Type of Facebook shopping fraud cases
1	19	Vocational high school	Game point exchanger	Unmarried	1	Individual transactions of wholesale communities
2	41	Vocational high	Yoga	Married	2 (same seller)	Second-hand perfumes are

		school	teacher			traded individually with communities of same hobbies
3	47	Vocational high school	Housewife	Married	1	Pulling group of communities of same cooking hobby

The criminal police department uncovered the one-page advertisement fraud case of Taiwan's Facebook for the first time on March 18, 2018, and then we contacted the organizer through referrals from colleagues to solicit interviews from the organizer. The basic data of the interviewees is as follows:

Basic Data of Criminal Police interviewees

Case No.	Age	Years of service as police	Years of service as criminal police	County or city working in
1	26	3 years	One and a half years	Taipei City

3. Data Compilation

This study made case analysis on the descriptive materials of in-depth interviews and summarized them one by one. In order to improve the validity of in-depth interview data, the following methods were used to correct the data: (1) Each interview was recorded and the audio tapes were compiled into verbatim transcripts; (2) Self-review was carried out after the interview; (3) Self-examination was carried out at any time to see if a good interview relationship was maintained with the interviewees so as to urge the interviewees to freely and truly express themselves; (4) Whether the attitude of the interviewers was neutral at any time? Was it too eager to focus? Did you fully respect the wishes of the interviewees? (5) During the interview, non-language information of the interviewees was always recorded to make up for the deficiency of language data.

IV. RESEARCH FINDINGS

This study explored the patterns of Facebook shopping fraud and to seek prevention and control measures. The following four themes are analyzed respectively: "personal background and online shopping experience", "Facebook shopping process", "follow-up treatment of fraud cases", "current situation and difficulties of police investigation of Facebook fraud cases".

1. Personal background and online shopping experience:

All three interviewees visited Facebook and shopping websites through their mobile phones. Some people bought goods and sold them on the internet, or bought them for their own use. There was no specific shopping budget. However, married people usually worried about the feelings of the other half and often reported more for less.

2. Facebook shopping experience:

(1) Motivation: Case 1 showed that 7,8 popular camera models had been purchased one after another through Facebook platform for resale, and the selling price was still higher than the manufacturer's suggested selling price due to the availability of rare products. Case 2 is relatively special. Most people shop for their own enjoyment or profit, but Case 2 is engaged in the rescue of stray cats at her own expense, and she has no funds. Because she used to use perfume and believed her identification ability and past experience in online shopping, she hoped to make buying and selling perfume as the sources of funds. Case 3 was due to the hype of the culinary association, which often has popular goods. Once the manufacturers are out of stock, some people will start selling such goods even at lower prices. They have fully grasped the topic, rarity and even lower prices to attract buyers.

(2) Attributes of Facebook shopping: All three interviewees shopped in the community, believing that the community has a more secure mechanism for checking its members, but the administrator was unable to handle the fraud cases in fact.

(3) Tricks of deception: All three interviewees have many years of experience in Facebook shopping and are quite confident that they will not be cheated. So what tricks did these sellers use to lure the victims?

(1) Delay in shipment: The victims did not receive a commodity for 1 or 2 weeks and asked the seller, the seller claimed that it was the mail company that sent the goods incorrectly or that the unreal tracking number could not be traced. They could not help the inquiry by Case 1 and simply blocked the victim's account number.

(2) Creating a common topic and nervous feeling about panic buying: According to case 2, she made it clear to use the money for stray cats at the beginning of purchase. The other party continued the topic, saying that she was also rescuing stray dogs and creating a kind image of "aspiring to be together" to win the trust of the victim. Even when the seller made a mistake or Case 2 once doubted the authenticity of the goods after receiving it, she still self-hypnotized and rationalized. Therefore, the other party took the initiative to talk again after getting greedy and even created a feeling of nervousness about the special price, making Case 2 unable to think carefully and then pay again.

(3) Creating an intimate feeling of being "friends": Case 3 is a veteran of online shopping for years. Although she has a high degree of awareness, the seller has gained her trust and maintained interaction after talking to her through private message many times. She believed that the other party was a "friend" and gradually removed her defense. In addition, the seller also provided agency purchasing service privately, and for the first time of agency purchase goods, the seller offered small gifts for the delay in delivery,

making her feel the seller to be very honest with good service attitude, so she continued to purchase and introduced her friends to join the community. The seller accepted members' orders one after another in the community and demanded to pay off the money in one lump sum. From time to time, the seller interspersed various preferential information and allowed several of the members to receive the goods to "confirm" that they were only busy, and they were slow in delivery was only due to their business, so that the members got relaxed. As a result, Case 3 had transactions for half a year with the seller and ordered a cumulative amount of over 20,000 NTD. Only after the fraud case occurred did she realize that some people had been cheated by more than 100,000 NTD, perhaps some people might have even suffered higher losses. According to the self-help group organized by the victims, the cumulative loss in this case exceeded 4 million NTD.

3. Follow-up Handling of Fraud Cases:

This section analyzes the follow-up handling by the victims of Facebook shopping fraud cases. For buyers with small losses, it is often believed that they have bought one experience and learned one lesson, but for buyers with large losses, they still want to recover through various channels.

(1) The three interviewees sought judicial treatment after their own investigation failed. Whether they went to report the case by themselves or through friends' persuasion, or wanted to entrust others to assist in reporting the case through the victim's self-help group, they wanted to deal with the case further. However, the progress of the case was slow and it was not easy to investigate. All three interviewees ended up disappointed.

(2) "Fraud prevention awareness": Since the establishment of "National Police Agency 165 anti-fraud hotline" 12 years ago, all three interviewees said they had heard of 165 hotline, but were completely unfamiliar with its actual effect.

(3) Whether they will shop through Facebook again in the future: After experiencing this fraud experience, will the interviewees continue to use Facebook or whether their judgment on fraud has improved? Cases 1 and Case 2 said that they have switched to the emerging three-party payment platform "Shopee" to pay for goods through the platform only after confirming that there is no problem with the goods. Case 1 even indicated that she will sign for payment only after she unpacks and inspects the goods on the spot and confirms that they are correct.

(4) Current situation and difficulties of police investigation into Facebook shopping fraud cases:

Due to the widespread one-page advertisement fraud on Facebook, the victims are numerous, and most of the sellers come across the sea from China, a study of criminal police has found that:

(1) The process of acceptance and investigation are not easy: Since Criminal Investigation Bureau is the highest organ in the unified command and supervision of Taiwan's criminal police, there will be no refusal to refer the people who report the case to the police stations of various counties and cities. However, in fact, it is very difficult for each unit to investigate such cases, especially cross-sea cases. It is very difficult for

both parties to investigate such cases without mutual legal assistance. Counterfeit products should be reported by the manufacturer or agent. In addition to the increasing number of such fraud cases in recent years, the investigation progress is slow, so it happens that there is no result of the cases as said by the victims.

(2) Fraud cases continue to increase: According to criminal police statistics, the number of fraud cases continues to increase. However, due to the maturity of the traditional online shopping system and the fact that third-party payment is used to prevent fraud cases, the people are highly dependent on Facebook and have no vigilance. In addition, there are cash on delivery and a "7-day appreciation period" claimed by unscrupulous merchants. When problems are found after the goods are received, the seller's customer service hotline cannot be contacted at all and there is no way for seeking for help.

(3) Facebook's one-page advertisement fraud technique: Most of the commonly used methods are using celebrities or news images to graft and transplant to gain trust from others, setting up warehouses in Taiwan to ship goods and save costs, providing consumption dispute-oriented products, updating with current topics or trends, shipping and collecting payment via the businesses in Taiwan. Besides being unable to prevent the fraud, the businesses must also absorb the loss of relevant formalities and expenses.

(4) Key to solving the crime problem: The criminal police department was able to successfully solve Taiwan's first one-page advertisement Facebook fraud case, the biggest key to solve the crime lies in the cooperation of the customs broker. And due to the large number of victims, it was necessary to carry out in-depth investigation, so it was reported to the public prosecutor to direct the investigation. Only when we have mastered many resources and are specially responsible for handling this case can we successfully solve this case.

(5) Difficulties in investigation: At present, most of the one-page advertisement sellers with the largest number of cases of shopping fraud through Facebook are abroad. The average property losses of victims of such cases are not high and are not easy to cause concern. In addition, due to the problem of jurisdiction, there is no clear channel of cooperation between the two sides, thus causing difficulties in investigation.

V. CONCLUSIONS

According to the results and conclusions of the interviews, the following research suggestions are summarized:

1. Collaboration of National Police Agency "165 anti-fraud hotline" with large-scale associations or internet celebrities for advocating: Many people have heard to 165 but do not know the actual effect. The competent authority or 165 anti-fraud advocacy can work with these large-scale associations or internet celebrities to shoot topical or interesting advocacy films, so as to make anti-fraud concepts close to the people's daily life and deeply rooted in the hearts of the people, thus achieving a completely anti-fraud effect.

2. Simplifying the process and procedures of handling cases: Fraud cases are increasing day by day, although they are no more frightening than major violent cases, they cause troubles to people's livelihood and economy as well as the lives of the general public. Most people give up reporting cases when considering the fatigue by a long journey and costs of reporting cases. It is necessary to set up a special task force or open windows in counties and cities to handle and integrate such cases.

3. Smooth cross-strait channels of mutual legal assistance: Fraud cases are no longer confined to a single region. With the development of science and technology and the internet, such cases have long been scattered around the world and criminal methods are constantly being renovated. Therefore, the harm of crime to social security is a problem of global commonality. If the police in all parts of the world can eliminate selfish departmentalism, uphold the concept of non-territorial limitation in cracking down on crimes, take cross-strait agreements as a precedent, actively integrate and establish partnerships, and construct a high-quality cross-border cooperation model, they can effectively control and crack down on cross-border crimes.

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