

The Types of Computer Crimes in Hong Kong and the Difficulties in Prosecuting such crimes



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Disclaimer



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Introduction



⌘ We will address the following:

- The known types of computer crimes in HK;
- The difficulties in prosecuting such crimes

Types of Computer Crimes in Hong Kong



⌘ The following are broadly the different types of computer crimes in Hong Kong: -

- ⊞ (a) Spammers;
- ⊞ (b) Intruders;
- ⊞ (c) Denial of Service;
- ⊞ (d) Using Computer/Internet as a media to commit traditional crimes

Spammers



⌘ Spamming is NOT an offence in itself under the laws of Hong Kong as in June 2001;

⌘ Spamming has been defined as unsolicited E-mail. The Internet version of "Junk mail."

Spamming




- ⌘ It is an attempt to deliver a message, over the Internet, to someone who would not otherwise choose to receive it. Almost all spam is commercial advertising
- ⌘ This may attract criminal sanctions under the Personal Data (Privacy) Ordinance
- ⌘ Sending large volume of unsolicited mails to one person may amount to criminal damage

The Intruders



- ⌘ Send a virus to your computer while you are on line
- ⌘ Obtain your login name and password, unknown to the owner of the login name
- ⌘ Use that to gain access to the Internet, saving the monthly fee/PNET fees

The Intruders, act of sending a virus



⌘ Criminal Damage, section 60 of the Crimes Ordinance, Cap 200

⌘ In this subsection, "misuse of a computer" (誤用電腦) means-

⌘ (a) to cause a computer to function other than as it has been established to function by or on behalf of its owner, notwithstanding that the misuse may not impair the operation of the computer or a program held in the computer or the reliability of data held in the computer;

The Intruders



- ⌘ (b) to alter or erase any program or data held in a computer or in a computer storage medium;
- ⌘ (c) to add any program or data to the contents of a computer or of a computer storage medium, and any act which contributes towards causing the misuse of a kind referred to in paragraph (a), (b) or (c) shall be regarded as causing it.

The Intruders, using login names and passwords of others



⌘ Access to a computer with a dishonest intent, section 161 of the Crimes Ordinance, Cap 200

- ⌘ (1) Any person who obtains access to a computer-
- ⌘ (a) with intent to commit an offence;
- ⌘ (b) with a dishonest intent to deceive;
- ⌘ (c) with a view to dishonest gain for himself or another; or
- ⌘ (d) with a dishonest intent to cause loss to another,
- ⌘ whether on the same occasion as he obtains such access or on any future occasion, commits an offence and is liable on conviction upon indictment to imprisonment for 5 years.

The Intruders



- ⌘ (2) For the purposes of subsection (1) "gain" (獲益) and "loss" (損失) are to be construed as extending not only to gain or loss in money or other property, but as extending to any such gain or loss whether temporary or permanent; and-
- ⌘ (a) "gain" (獲益) includes a gain by keeping what one has, as well as a gain by getting what one has not; and
- ⌘ (b) "loss" (損失) includes a loss by not getting what one might get, as well as a loss by parting with what one has.

Denial of Service (DoS)



- ⌘ Large Web Sites overseas;
- ⌘ Sending massive data to one site within a short period of time;
- ⌘ One type of such attack is e-mail bomb;
- ⌘ All resources taken up;
- ⌘ Normal service denied;
- ⌘ Offenders usually have grudges against target

DoS



- ⌘ For example, ex-employee fired by the employer, business rival;
- ⌘ Criminal Damage (section 60 of the Crimes Ordinance)
- ⌘ Maximum penalty : 10 years

Examples of Known Computer Crimes in HK



- ⌘ HKSAR v Tsun Shui Lun
[1999] 2 HKC 547
- ⌘ Release of the medical records of the Secretary for Justice to the press without the consent of SJ
- ⌘ Charged with access to a computer with a dishonest intent
- ⌘ Sentenced to 6 months imprisonment after trial in the magistracy

HKSAR v Tsun Shui Lun



- ⌘ On appeal, the sentence was reduced to 100 hours of community service
- ⌘ The Chief Judge has the following to say:
 - ⊠ Not every kind of access into a computer constitutes an offence under section 161;
 - ⊠ It is the *intent or purpose of the offender at the time of access* which must be looked at, not his intent or purpose at some later stage;

HKSAR v Tsun Shui Lun



- ⌘ Section 161 catches acts preparatory to the commission of a crime or fraud. However it is not restricted to such acts
- ⌘ A person making unauthorised access need not have any intention to commit a crime or fraud;

HKSAR v Tsun Shui Lun



⌘ The meaning of the word 'gain' under section 161:-

- ☐ is not confined to financial or proprietary benefits;
- ☐ is wide enough to cover intangible benefits;
- ☐ can be transient as opposed to permanent benefits;

HKSAR v Tsun Shui Lun



- ⊠ includes the keeping of what one has or the getting of what one has not;
- ⊠ is inclusive (as opposed to the word gain defined in section 8 of the Theft Ordinance) and casts an open net;
- ⊠ includes information which the person obtaining access to a computer did not have before the access;

HK SAR v Tsun Shui Lun



- ☒ anticipates a benefit or advantage;
- ☒ does not necessarily include something which can be utilised or used

HK SAR v TAM Hei-lun & Others

HCMA 385/2000



- ⌘ D2 sent a virus to other internet users;
obtained 127 login names and passwords
- ⌘ He used them to gain access to the
Internet
- ⌘ He sold some compromised accounts to
D1 for about HK\$3000

HK SAR v TAM Hei-lun & Others

HCMA 385/2000



- ⌘ D1 used the compromised accounts to gain access to the Internet
- ⌘ D1 sold these accounts to 5 other persons and obtained a profit of HK\$1,500;

HKSAR v TAM Hei-lun & Others

HCMA 385/2000



- ⌘ D3 obtained compromised account from D2 for free and used them to gain access to the Internet
- ⌘ D3 also set up a web page inviting the public to place order for infringing discs in MP3 format; there was a list of 300 songs available

HKSAR v TAM Hei-lun & Others

HCMA 385/2000



- ⌘ D3 charged \$88 (1 disc), HK\$160 (2 discs) and HK\$210 (3 discs);
- ⌘ Orders would be placed by e-mail and after making the infringing discs with CD-Rs, D3 mailed the discs to the customer
- ⌘ He obtained over HK\$10,000

HKSAR v TAM Hei-lun & Others

HCMA 385/2000



⌘D2

- ⊞ 3 charges of criminal damage
- ⊞ 12 charges of obtaining access to computer with a view to dishonest gain

⌘D1

- ⊞ 14 charges of obtaining access to computer with a view to dishonest gain
- ⊞ 8 charges of dealing with proceeds of indictable offence

HKSAR v TAM Hei-lun & Others

HCMA 385/2000



⌘D3

- ⊞ 2 charges of obtaining access to a computer with a view to dishonest gain
- ⊞ 10 charges of making for sale or hire infringing copies of copyright works
- ⌘ All defendants were of young age and had clear records;
- ⌘ All pleaded guilty before a magistrate

HKSAR v TAM Hei-lun & Others

HCMA 385/2000



⌘ D2 : 6 months imprisonment

⌘ D1 : Detention Centre

⌘ D3: Detention Centre

⌘ On appeal, the Court of Appeal dismissed the appeals of D1 and D3.

⌘ D2 abandoned his appeal at the start of the appeal

HKSAR v TAM Hei-lun & Others

HCMA 385/2000



⌘ Rogers VP said:-

- ⊠ inappropriate to issue guidelines since there have been very few prosecutions under section 161;
- ⊠ therefore the full range of crimes which would fall within 161 would not be known;

HKSAR v TAM Hei-lun & Others

HCMA 385/2000



- ⊡ The considerations that a court would take in sentencing in section 60 and 161 offences
 - ⊗ the loss and damage caused to the victims;
 - ⊗ the gravity of the offence to the victim;
 - ⊗ the purpose of the access;
 - ⊗ any gain financially or otherwise to the person pertaining to the access

HKSAR v TAM Hei-lun & Others


HCMA 385/2000



- ⊠ The act of accessing the computer of another person can in many aspects be likened to burglary
- ⊠ Unless there are most unusual circumstances a non-custodial sentence would be inappropriate for offences under section 161

HKSAR v CHOI Kong-lam


ESCC 4722 of 2000



- ⌘ Student sending PING attacks (one form of DOS) on CSL (Now PCCW);
- ⌘ Service of Netvigator suspended;
- ⌘ PCCW a loss of \$344,500 (time costs)
- ⌘ He was caught on line carrying out PING attacks;
- ⌘ He was charged with 8 charges of Criminal Damage (sample charges)

HKSAR v CHOI Kong-lam

ESCC 4722 of 2000



⌘ He pleaded guilty and was sentenced to
Detention Centre

HKSAR v KO Kam-fai

DCCC 1163 of 2000



- ⌘ Defendant sent obscene and intimidating e-mail messages to 2 HK women, one of whom was his the secondary school classmates;
- ⌘ He sent many e-mail messages to the 2 victims as a result of which the capacity of the victim's account exceeded. Those e-mail messages had to be deleted manually
- ⌘ The e-mail accounts were temporary unusable

HKSAR v KO Kam-fai

DCCC 1163 of 2000



- ⌘ In some of the e-mails, he threatened to rape the victims;
- ⌘ He was charged with a number of offences;
- ⌘ He pleaded guilty to 8 charges of criminal damage and 2 charges of criminal intimidation
- ⌘ 1 year imprisonment

HKSAR v KO Kam-fai

DCCC 1163 of 2000



- ⌘ Ko appealed against his sentence, arguing that the judge erred in sentencing the defendant to imprisonment
- ⌘ Appeal heard on 20 June 2001 (last Wednesday).
- ⌘ Application for leave to appeal against sentence dismissed

HKSAR v CHAN Man-shun

ESCC 5108/00



- ⌘ In newsgroup, D advertised that he could make CDs containing songs in MP3 at a costs of HK\$100 per 4 discs;
- ⌘ Buyers sent e-mails to D indicating the desired songs
- ⌘ Cash Delivery at MTR station
- ⌘ Pleaded Guilty

HKSAR v CHAN Man-shun

ESCC 5108/00



- ⌘ In mitigation, it was urged upon the Court that the accused had a history of depression
- ⌘ 120 hours of Community Service Order

Computer King



- ⌘ 14 years old kid, F2 student
- ⌘ Set up a site where one can download up to 300 songs in MP3 format;
- ⌘ He was arrested on 14 May 2001;
- ⌘ 3 computers were found, one used a server;
- ⌘ The rest of the songs were placed in one local free web posting space and one overseas

Computer King



- ⌘ A notice on the site that the object of the site was to enable the public to have an opportunity to hear the CDs before buying them;
- ⌘ It says “The songs downloaded should be deleted within 24 hours of download”
- ⌘ No prosecution was instituted against the school boy

Difficulties in Prosecuting Computer Crimes



⌘5 main difficulties

- ☒ International Dimension
- ☒ Attitude of Victim
- ☒ Collection of evidence
- ☒ Presentation of evidence
- ☒ Identity of user of computer

International Dimension



- ⌘ Witness and evidence overseas
- ⌘ In case of KO Kam-fai, evidence was taken from the USA as the e-mails were routed through the States and back to HK

Attitude of Victim



- ⌘ General lack of awareness of computer security;
- ⌘ Sharing of Passwords;
- ⌘ Use of simple password;
- ⌘ Stick password on computer monitor or below mouse pad
- ⌘ Unwillingness to testify, particular overseas / stupidity / minor loss

Collection of evidence



⌘ Log records

⌘ Real Time Records

⌘ Encryption

Presentation of evidence



- ⌘ Judge and Jury familiarisation or otherwise with computer/internet
- ⌘ Defence counsel
- ⌘ Prosecutors
- ⌘ Witness

Identity of user of the computer



- ⌘ Trace the origin of the computer
- ⌘ Who used it?
- ⌘ Husband and wife

Conclusion



- ⌘ We have relatively few prosecutions of computer crimes in HK;
- ⌘ It is glad to see that the Courts have adopted a stringent approach towards hackers
- ⌘ Yet to see a fully contested computer crime trial