

TIC Y LOS DELITOS INFORMÁTICOS

ICT AND COMPUTER CRIMES

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Abstract: The new digital era of cyberspace is now a relevant issue, a priority for the interaction between people and institutions to share and obtain information in the active activities of the digital world. Criminal activity and behavior is reflected in ICT through the methods and software that trigger criminal behavior by compromising personal security on social networks. Developed using a qualitative approach, descriptive and interpretive design with an intentional and conscious selection of Bronfenbrenner's ecological theory. The findings include spying on conversations and private emails, identity theft, fake profiles, morphing, cyberbullying, sexting, SMS, grooming, social networks like Facebook, Whatsapp and virtual attacks on Instagram, Facebook.

Key words: TICS, Colombian criminal code, Constitution, Computer crimes, Virtual theft, Social networks, Security against the regulation of computer crimes.

Resumen: La nueva era digital del ciberespacio es ahora un tema relevante, una prioridad para la interacción entre personas e instituciones para compartir y obtener información en las actividades activas del mundo digital. La actividad y el comportamiento criminales se reflejan en las TIC a través de los métodos y software que desencadenan conductas criminales al comprometer la seguridad personal en las redes sociales. Desarrollado utilizando un enfoque cualitativo, diseño descriptivo e interpretativo con un muestreo intencional y una selección consciente de la teoría ecológica de Bronfenbrenner. Los hallazgos incluyen espionaje de conversaciones y correos electrónicos privados, robo de identidad, perfiles falsos, morphing, ciberacoso, sexting, SMS, grooming, redes sociales como Facebook, Whatsapp y ataques virtuales en Instagram, Facebook

Palabras Clave: TIC Código penal colombiano, Constitución, Delitos informáticos, Hurto virtual, Redes sociales, Seguridad frente a la regulación de los delitos informáticos.

1. INTRODUCTION

Social networks have been a key point of interaction between people in the contemporary world; however, this has brought notorious consequences in society and new forms of crime, the most executed being computer break-in, theft, impersonation, which is why computer crimes have increased over time, through implementation and entry into the digital world. According to Dijín, 2020, 18,255 crimes were recorded in ICTs; being, noticeably, with a higher percentage than in 2019, which obtained 9,300. (Acosta Argote. Cristian. 2021).

Colombia Fintech This type of virtual crime has grown by 409% during Covid-19. As a result, organizations and individuals have been affected by fraud and the substitution of cybernauts in the digital world.

1.1. Problem statement and justification

The issue of incorrect use of ICT and computer crimes, which are increasing every day at all social levels in the socio-educational environment, is discussed. Computer tools before and during the pandemic served as a tool in communication, in turn, these have had a correct and incorrect use of these communication channels. The disadvantage of these channels is intimidation, fraud or impersonation of a person or company, it also infers on the diversity of expressions as a consequence, which brings suicides as a triggering agent in response to cyberbullying and cyber addiction.

(Ojeda Pérez Jorge et al. 2010). The regulation of cybercrime, in personal relationships and communications, as a consequence of cybercrime, takes into account the economic, political, social field and in turn strengthens computer security in organizations. (Zambrano-Mendieta, et al. 2016). The use of fraudulent programs that contain viruses are the most common computer crimes, since they are embedded in processors, to infect the computer security system.

(Borghello, Cristian. et. al., 2017). Digital identity theft as a computer crime.

Sexting. Publication of sexual digital materials on social media and the Internet without the victim's authorization, violating privacy in order to make it public.

Online grooming is the interaction of an adult with ICTs, as an effect is to gain the trust of the person to encourage and maintain online sexual contact. (Kloess, J. A., Beech, A. R., & Harkins, L, 2014; Wurtele & Kenny, 2016). Therefore, to interact in different sexual activities; (Mitchell, Finkelhor, & Wolak, 2007), while the second aspect consists of interactions of an adult (Gámez-Guadix, De Santisteban, & Alcazar, 2017). In this way, child pornography has violated the fundamental rights of the sexually abused minor. (MORA, 2019).

Below are the attacks on social networks that have affected university students in Pamplona, Villa del Rosario extension. In first order of impact, another digital crime is computer fraud or forgery, in the case of the social network: Instagram.

The research was carried out with a survey; which is recognized through the penal code; the computer crimes and ICTs in the university students of Pamplona, Villa del Rosario extension, were also analyzed and categorized.

The evolution and transformation to interact in social, economic, educational and organizational spheres from anywhere in the world, this entails the need to learn and interact in the digital world, in real time from anywhere in the world.

The incorrect use of ICT or the digital world is necessary, to achieve and provide support to the cybernaut, to natural persons to defend and report these acts.

What are computer crimes and ICTs in the university of Pamplona, Villa del Rosario extension?

2. REFERENCE FRAMEWORK

Colombian regulations, in article 15, established the fundamental right of the citizen. In exchange, we protect data and ensure legal security in the use of ICT through constitutional guarantees.

Article 2. Regulations related to articles 192, 193, 194, 195, 196, highlight the violation, privacy and illicit use of communications networks.

Article 357: The law and legal framework contribute to the international level in relation to the protection of information and computer resources of countries,

through the “cybercrime” agreement. (Beltrán Báez, Angie and Carrillo Carrascal, Juliana. 2017). (Acosta, María Gabriela et. al. 2020). They determined the types and risks of cybercrime in companies and the recognition of the security of social networks, to counteract their expansion, discredit and blackmail the cybernaut.

(Rivera Barrantes, Viviana 2019). Privacy of personal data in Costa Rica; with personal data for theft, bribery, fraud, criminal conduct that frequents Law No. 8968 on: "Protection and guarantee respect for their rights to the extraction of information.

(Pons Gamon, V. 2017). The author analyzed cyberterrorism and its causes to counter it through legal bases (Spanish, European and international legislation); also, (Ruiz Díaz 2016). He highlighted the police database in the countries to detect economic fraud and sexual exploitation.

(Poveda Criado, Miguel Ángel; Torrente Barredo, Begoña 2017). ICT is a tool that has been evolving with efficiency, effectiveness and at the same time with disadvantage, since it puts the person and the organization at risk by cyberterrorism.

(Mayer Lux, Laura. 2017). Recognized the interest of the characteristics is justified if said crimes, which involve computer networks. Reflecting on the functions of computer systems for the development of the person and institutions.

(Trejo Carlos Alcívar. et. al., 2015). Computer crimes as electronic crimes, for the advancement of computing.

(Salvadori, I. 2013). Mentioned that the types of sanctions and actions are not very clear, this is the main reason why people are victims of this virtual world with a higher rate of danger.

(Dávila Suancha, Jenifer Carolina. et. al. 2020). The authors express the importance of ensuring security and internal legal regulations such as international legislation and implementing regulations for computer tools.

(Alvarado Carmona, Manuel. 2017). Analyzed the legal aspects and their relationship with the violation of Colombian regulations in which computer crimes are found in the protection of information, data, insult, slander, cyberbullying and copyright.

(Franco Reyes, A. M. 2017). Interpersonal connections to cybercrime to commit economic and personal crimes by affecting their right to honor, privacy and income. In this way, the state must pursue these crimes.

(Rodríguez Arbeláez, Juan David. 2014). The protection of information in ICT is the revolution of the computing and communications industries, which favor the streamlining of business, educational, judicial and social processes.

(Caamaño Fernández, Enier Enrique. et. al., 2020). They analyzed how ICT plays an important role in the social, business world in intellectual and economic knowledge, forensic auditing becomes relevant to protect and favor organizations from cyber-attacks in the detection of fraud, computer crimes and corruption in the business world

(Granados Ramírez, Ricardo. et. al., 2016). The authors referenced its applicability in the judicial district of Cúcuta in the period 2012 - 2014. As a consequence, to computer criminals.

(Ovalle Lizcano, T. V., et. al. 2019). The authors mentioned that cybercriminals carry out activities such as theft; therefore, the use of ICT is incorrect.

(Contreras-Manrique, R. de B., et. al. 2020). The article dealt with changes in values and the incorrect use of social networks; the cybercriminal uses the personal data and innocence of students, in which they express their private life to later be discredited, or victims of harassment, theft.

(Contreras-Manrique, L., et. al. 2020). They analyzed personality traits in socialization processes, including anxiety, sadness or depression, impulsiveness in social interaction.

(Suárez Sánchez Alberto., 2016). In crimes against information and data, their classification is made, the criminal types of said punishable acts are indicated, and the circumstances of modification of the sentence are explained.

Law 1928 of 2018 International agreement with the government signed in Budapest and Law 1273 of 2019 that allows reducing rates and prosecuting criminals.

Social networks bring new digital crimes, in Colombia sexting and texting in the virtual space are just becoming known.

It is necessary to mention the most frequent digital crimes in the interaction on social networks in Unipamplona students, the following are taken into account

Grooming. It is perpetuated through Facebook.

Fake profiles. It is a crime to create profiles that are then published and attack the victim's good name; then, sexting.

Next, it is significant to mention Bronfenbrenner's ecological theory (1987). Therefore, the ecological model intervenes in human life, making it necessary to protect our rights and personal security in cyberspace.

(Chacón-López. et.al.. 2019). Sexting is a social phenomenon. Both genders practice sexting, but it is constant among males, with the practice increasing until the age of 21 and decreasing at 24 years.

(Mancini, I., (2016). I analyze the young people residing in the computer crime program.

(Arellano Martínez Irma, 2017). It was detected that students lack culture regarding the use of social networks, which puts them at risk.

3. METODOLOGY

Research developed with a qualitative approach, using information collection through interviews. Hernández, Fernández, Baptista (2008).

4. RESULTS, ANALYSIS AND INTERPRETATION

The Category in computer crimes and ICTs in interaction; in the first order, the students mentioned that they have entered without consent; in the second order, the incorrect management of ICTs and the custody of information in virtuality.

To this end, the research highlighted the most common forms of spying on private conversations or email, followed by identity theft, then false profiles, followed by morphing, then cyberbullying, sexting, texting, and finally, grooming through social networks, for which Facebook, WhatsApp, and email stood out in students.

Category of virtual theft. In this way, students interact with banking applications, nequi, on their mobile. Consequently, they stated, they have been victims of virtual theft. Another digital crime is

computer forgery or fraud such as Instagram, Facebook and cell phone calls offering employment courses, or receiving a travel prize.

5. DISCUSSION AND CONCLUSIONS

Category in computer crimes and ICT. Mentioned that if they have entered their social networks without consent and have attempted against their personal integrity. In third order, (Ovalle Lizcano, T. V., et. al. 2019), the incorrect handling of information including photos, videos, etc. Finally, their personal information has been disseminated on the Internet. For this, the spying of conversations was highlighted, followed by identity theft, in third order false profiles, followed by morphing, in fifth order, cyberbullying, sexting, texting and, finally, grooming, Facebook, Whatsapp, were highlighted.

Category: virtual theft: students have banking applications, Nequi on their mobile. Therefore, they stated that they and other people have been victims of virtual theft. Another digital crime is computer forgery or fraud that was highlighted in the investigation, with social networks on Instagram and Facebook.

To conclude; It is vital to understand that the correct use of social networks is everyone's responsibility and this is achieved through the knowledge that each person can acquire about ICTs. For this reason, it is the task of the Colombian state and educational institutions to guide and provide support to all its members, to prevent them from becoming victims of computer crimes and the existing forms of computer crime.

RECOGNITION

Students from the Universidad de Pamplona.

6. REFERENCES

- Acosta, María Gabriela, & Benavides, Merck Milko, & García, Nelson Patricio (2020). Delitos informáticos: Impunidad organizacional y su complejidad en el mundo de los negocios. *Revista Venezolana de Gerencia*, 25(89),351-368. [fecha de Consulta 11 de enero de 2022]. ISSN: 1315-9984. Disponible en: <https://www.redalyc.org/articulo.oa?id=29062641023>

- Ojeda Pérez Jorge et al. (2010). *cuad. contab. / Bogotá, Colombia*, 11 (28): 41-66 / enero-junio 2010 /
- Zambrano-Mendieta, José; Dueñas-Zambrano, Kelvin y Macías-Ordoñez, Lucía (2016), Delito informático: Procedimiento penal en el Ecuador. *Revista Científica Dominio de las Ciencias*, Año 2, Nro. esp., ago, pp 204-215.
- Borghello, Cristian; Temperini, Marcelo Gabriel Ignacio. (2017). Suplantación de Identidad Digital como delito informático; B de F; 291-312
- Kloess, J. A., Beech, A. R., & Harkins, L. (2014). Online child sexual exploitation prevalence, process, and offender characteristics. *Trauma, Violence, & Abuse*, 15, 126-139. doi: 10.1177/1524838013511543
- Wurtele, S. & Kenny, M. (2016). Technology-Related Sexual Solicitation of Adolescents: A Review of Prevention Efforts. *Child Abuse Review*, 25, 332-344. doi: 10.1002/car.2445
- Mitchell, K. J., Finkelhor, D., & Wolak, J. (2007). Youth Internet users at risk for the most serious online sexual solicitations. *American Journal of Preventive Medicine*, 32, 532-537. doi: 10.1016/j.amepre.2007.02.001
- Gámez-Guadix, M., De Santisteban, P., & Alcazar, M. (2017). The construction and psychometric properties of the questionnaire for online sexual solicitation and interaction of minors with adults. *Sexual Abuse: A Journal of Research and Treatment*, 30(8), 1-17. doi: 10.1177/1079063217724766
- Mora, A. Pornografía infantil: la cara oscura de Internet. 2019. [En línea]. Disponible: https://elpais.com/elpais/2018/11/15/planeta_futuro/1542292342_375507.html
- Constitución política de Colombia. Editorial legis S.A. 2006.
- Colombia. congreso de la república. Proyecto de ley 050/2017C (28 de julio de 2017). Ley contra Crímenes Cibernéticos. Cámara de Representantes.
- Código penal, (L. 599/2000). Editorial legis S.A.
- Beltrán Báez, Angie y Carrillo Carrascal, Juliana. (2017). EL acceso abusivo a sistemas informáticos en el ordenamiento jurídico colombiano: problemáticas y propuesta para su superación. Colegio Mayor Nuestra Señora Del Rosario, Universidad Del Rosario. Bogotá . Colombia.
- Acosta, María Gabriela, & Benavides, Merck Milko, & García, Nelson Patricio (2020). Delitos informáticos: Impunidad organizacional y su complejidad en el mundo de los negocios. *Revista Venezolana de Gerencia*, 25(89),351-368. [fecha de Consulta 11 de enero de 2022]. ISSN: 1315-9984. Disponible en: <https://www.redalyc.org/articulo.oa?id=29062641023>
- Rivera Barrantes, V., (2019). Realidad sobre la Privacidad de los Datos Personales en Costa Rica. *Revista e-Ciencias de la Información*, 9(2), 68-81. <https://doi.org/10.15517/eci.v9i2.37503>
- Pons Gamon, V. (2017). Internet, la nueva era del delito: cibercrimen, ciberterrorismo, legislación y ciberseguridad/ Internet, the new age of crime: cybercrime, cyberterrorism, legislation and cybersecurity. URVIO. *Revista Latinoamericana De Estudios De Seguridad*, (20), 80-93. <https://doi.org/10.17141/urvio.20.2017.2563>.
- Ruiz Díaz, Joaquín. (2016). “Ciberamenazas: ¿el terrorismo del futuro?”, http://www.ieee.es/Galerias/fichero/docs_opinion/2016/DIEEEO86-2016_Ciberamenazas_JRuizDiaz.pdf.
- Mayer Lux, Laura. (2017). El Bien Jurídico Protegido En Los Delitos Informáticos. *Revista Chilena De Derecho*, 44(1), 261-285. <https://dx.doi.org/10.4067/S0718-34372017000100011>.
- Trejo Carlos Alcívar y otros. (2015). La Seguridad Jurídica frente A Los Delitos Informáticos AVANCES, *Revista de Investigación Jurídica* (2015); 10(12). Cajamarca ISSN2220-2129
- Salvadori, I. (2013). La regulación de los daños informáticos en el código penal italiano. *IDP. Revista de Internet, Derecho y Política*, (16), 44-60.
- Dávila Suancha, Jenifer Carolina, Archila-Guío, Jesús Enrique, dir., Sánchez-Acevedo, Marco Emilio, dir.. (2020). Los delitos informáticos en el derecho colombiano y desde la perspectiva del derecho comparado . Trabajo de grado. Universidad Católica de Colombia
- Alvarado Carmona, Manuel Adolfo., (2017). Aspectos legales al utilizar las principales redes sociales en Colombia. *Revista Logos, Ciencia & Tecnología*, 8(2),211-220.[fecha de Consulta 29 de Noviembre de 2022]. ISSN: 2145-549X. Recuperado de: <https://www.redalyc.org/articulo.oa?id=517752177019>. <https://doi.org/10.22335/rlct.v8i2.315>
- Franco Reyes, A. M. (2017). Las redes sociales y los delitos de injuria y calumnia en Colombia.

- Trabajo de Grado. Universidad Católica de Colombia. Facultad de Derecho. Bogotá, Colombia.
- Rodríguez Arbeláez, Juan David. (2014). Análisis de los delitos informáticos presentes en las redes sociales en Colombia para el año 2011 y su regulación. bdigital.ces.edu.co
- Caamaño Fernández, Enier Enrique, & Gil Herrera, Richard de Jesús (2020). Prevención de riesgos por ciberseguridad desde la auditoría forense: conjugando el talento humano organizacional. *NOVUM, Revista de Ciencias Sociales Aplicadas*, *1(10)*, 6 1-80-1 fecha de Consulta 13 de Octubre de 2020 | . ISSN: 01 2 I -5698. <https://www.redalyc.org/articulo.oa?id=5713/571361695004>.
- Granados Ramírez, Ricardo & Parra Rojas, Astrid Carolina. (2016). El Delito De Hurto Por Medios Informáticos Que Tipifica El Artículo 2691 De La Ley 1273 De 2009 y su aplicabilidad en el distrito judicial de Cúcuta En El Periodo 2012-2014. <https://repository.unilibre.edu.co/handle/10901/9310>
- Congreso de la república. Proyecto de ley 050/2017C (28 de julio de 2017). Ley contra Crímenes Cibernéticos. Cámara de Representantes.
- Colombia. congreso de la república. Proyecto de ley 050/2017C (28 de julio de 2017). Ley contra Crímenes Cibernéticos. Cámara de Representantes.
- Ovalle Lizcano, T. V., Coronel Peñuela, D. L., Contreras Manrique, R. de B. , & Cabrera Reyes, A. . (2019). Impacto sobre la seguridad personal frente a la regulación de la ciberdelincuencia en la Universidad de Pamplona, sede de Villa del Rosario. *Revista Respuestas UFPS*, *24(3)*, 14–25. <https://doi.org/10.22463/0122820X.1845>.
- Contreras-Manrique, L., Contreras-Manrique, R. de B., Ovalle-Lizcano, T. V., & Rincón-Leal, J. F. (2020). Análisis descriptivo de rasgos de personalidad en relación con el género y la edad de los estudiantes de la universidad de pamplona en la sede villa rosario. *Revista Eco Matemático UFPS*, *11(1)*, 52-62.
- Contreras-Manrique, R. de B., Contreras-Manrique, L., Ovalle-Lizcano, T. V., Espinosa-Bohórquez, L. M., Valero-Bencardino, J., Coronel-Peñuela, D. L., & Cabrera-Reyes, A. . (2020). Descripción de los problemas sociales influyentes en la transición moral en una sociedad cambiante a través del enfoque cuantitativo. *Revista EcoMatemático UFPS*, *11(2)*, 6–17. <https://doi.org/10.22463/17948231.3016>
- Suárez Sánchez, Alberto (2016). Manual de delito informático en Colombia. Análisis dogmático de la ley 1273 de 2009 . U. Externado de Colombia. Derecho penal, ISBN:9789587725957 <https://publicaciones.uexternado.edu.co/media/hipertexto/pdf/lecciones/lecciones-parte-especial-vol-2.pdf>
- Colombia. congreso de la república. Proyecto de ley 050/2017C (28 de julio de 2017). Ley contra Crímenes Cibernéticos. Cámara de Representantes.
- Colombia. congreso de la república. Proyecto de ley 050/2017C (28 de julio de 2017). Ley contra Crímenes Cibernéticos. Cámara de Representantes.
- Corte Constitucional.. la Ley 1273 de 2019
Corte Constitucional.. ley de 2017 https://revistas.usergioarboleda.edu.co/index.php/cuadernos_de_derecho_penal
<https://www.redipd.org/es/tribuna/colombia-y-el-convenio-de-budapest-contral-el-ciberdelincrimen>
- Bronfenbrenner, U. (1987). *La ecología del desarrollo humano*. Barcelona, España: Paidós
- Chacón-López, Helena; Caurcel-Cara, María Jesús; Romero-Barriga, Juan Francisco.(2019). Sexting en universitarios: relación con edad, sexo y autoestima *Suma Psicológica*, vol. 26, núm. 1, 2019, Enero-Junio, pp. 1-8 Fundación Universitaria Konrad Lorenz DOI:<https://doi.org/10.14349/sumapsi.2019.v26.n1.1>
- Mancini, I., (2016). Clasificación y producción de beneficiarios en una política de prevención social del delito. *Revista Estudios Socio-Jurídicos*, *18(1)*,103-133.[fecha de Consulta 29 de Noviembre de 2022]. ISSN: 0124-0579. Recuperado de: <https://www.redalyc.org/articulo.oa?id=73343370004>
- Arellano Martínez, I., (2017). La cultura sobre seguridad informática en las redes sociales: el caso de los estudiantes de la Preparatoria de San Diego Cuernavaca, México. *RICSH Revista Iberoamericana de las Ciencias Sociales y Humanísticas*, *6(11)* . <https://www.redalyc.org/articulo.oa?id=503954319002>
<https://doi.org/10.23913/ricsh.v6i11.106>
- Hernández, R; Fernández, C. y Baptista, P. (2008). *Metodología de la Investigación*. Bogotá: McGraw Hill.
- Ovalle Lizcano, T. V., Coronel Peñuela, D. L.,

Contreras Manrique, R. de B. ., & Cabrera Reyes,
A. (2019). Impacto sobre la seguridad personal
frente a la regulación de la ciberdelincuencia
en la Universidad de Pamplona, sede de Villa
del Rosario. *Revista Respuestas UFPS*, 24(3),
14–25.

<https://doi.org/10.22463/0122820X.1845>.

WEB SITES

<https://colombiafintech.co/lineaDeTiempo/articulo-los-tipos-de-fraude-en-linea-mas-frecuentes-en-Colombia>