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PICARD 2021

1. Background

The declaration of the COVID -19 Pandemic, by the World Health Organization during March 2021, revolutionized the world and accelerated the use of technology in all areas with social distancing. The use of technology was necessary to do many things and, consequently, cases of fraud increased.

On the other hand, regarding the health issue, the whole world mobilized in the distribution of medicines and vaccines, this point being also a subject of analysis, because, despite the pandemic; fraudulent operations and product counterfeiting increased.

1. Background

With the use of technology, the study and application of Artificial Intelligence and Machine Learning, it has also increased in many sectors, including the education sector and in anti-corruption investigations and practices.

H2O.ai

Keras

Shogun

WEKA

Apache Mahout

Accord.NET

Azure Machine Learning

Apache Singa

TensorFlow

Google Cloud ML Engine

PyTorch

Amazon Machine Learning (AML)

2. Pandemic fraud

279,513
Total Fraud Reports

$627.01M
Total Fraud Loss
*45.6% of Fraud reports indicate a loss

$400
Median Fraud Loss

Top Fraud Reports

Amount

Category	Reports	Amount
Online Shopping	59,879	$49.50M
Vacation & Travel	47,805	$83.34M
Diet Products, Plans & Centers	16,108	$2.61M
Government Imposters	13,121	$20.80M
Business Imposters	9,210	$27.52M
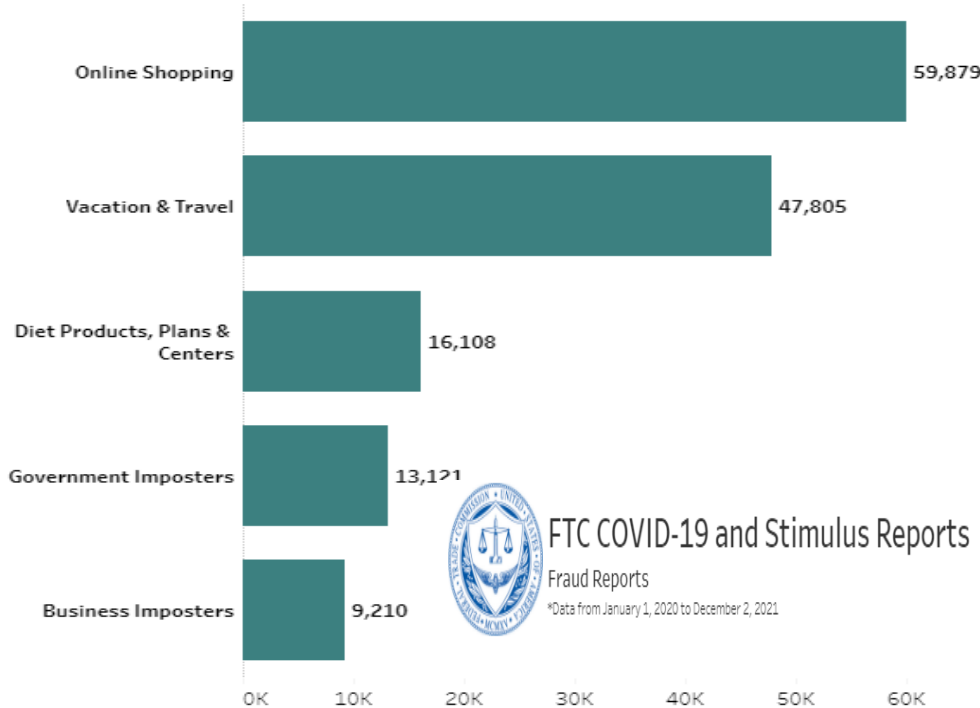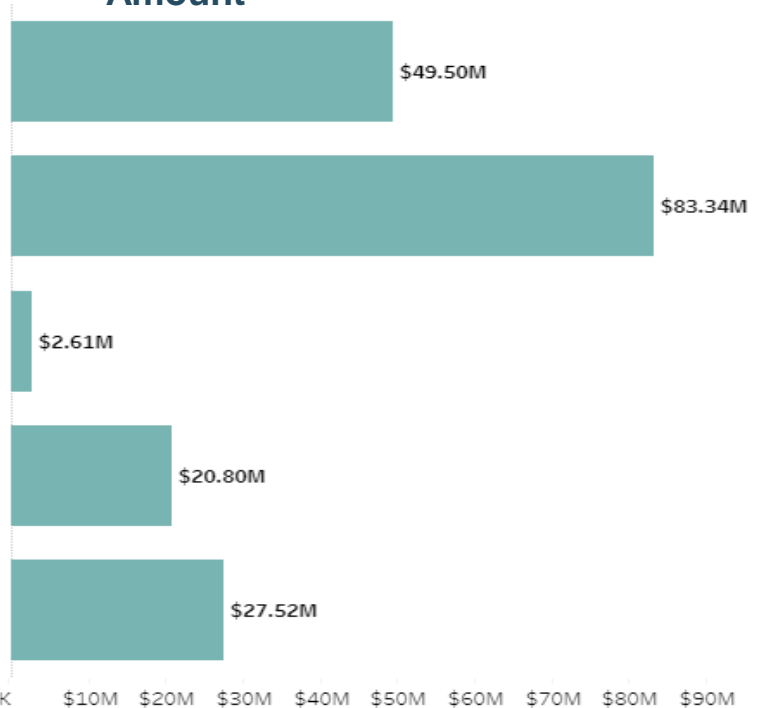
FTC COVID-19 and Stimulus Reports

Fraud Reports
*Data from January 1, 2020 to December 2, 2021

0K 10K 20K 30K 40K 50K 60K 70K $10M $20M $30M $40M $50M $60M $70M $80M $90M

2. Pandemic fraud

PICARD 2021

Currently

Predicted

TOP 5 FRAUD SCHEMES
CURRENTLY OBSERVED
DUE TO THE CORONAVIRUS

CYBERFRAUD
85% OVERALL INCREASE | 52% SIGNIFICANT INCREASE

IDENTITY THEFT
73% OVERALL INCREASE | 35% SIGNIFICANT INCREASE

PAYMENT FRAUD
72% OVERALL INCREASE | 35% SIGNIFICANT INCREASE

UNEMPLOYMENT FRAUD
69% OVERALL INCREASE | 40% SIGNIFICANT INCREASE

FRAUD BY VENDORS AND SELLERS
67% OVERALL INCREASE | 33% SIGNIFICANT INCREASE

BASED ON DATA FROM FRAUD IN THE WAKE OF COVID-19:
BENCHMARKING REPORT (ACFE.COM/COVIDREPORT.ASPX)
ACFE

TOP 5 FRAUD SCHEMES
PREDICTED INCREASE OVER 12 MONTHS
DUE TO THE CORONAVIRUS

CYBERFRAUD
88% OVERALL INCREASE | 57% SIGNIFICANT INCREASE

PAYMENT FRAUD
82% OVERALL INCREASE | 43% SIGNIFICANT INCREASE

UNEMPLOYMENT FRAUD
81% OVERALL INCREASE | 46% SIGNIFICANT INCREASE

FRAUD BY VENDORS AND SELLERS
80% OVERALL INCREASE | 38% SIGNIFICANT INCREASE

HEALTH CARE FRAUD
79% OVERALL INCREASE | 42% SIGNIFICANT INCREASE

BASED ON DATA FROM FRAUD IN THE WAKE OF COVID-19:
BENCHMARKING REPORT (ACFE.COM/COVIDREPORT.ASPX)
ACFE

https://www.acfe-mexico.com.mx/inicio/covid/

2.1.   Operations during the pandemic in México.

- As a result of the pandemic, there was a greater demand for operations and consequently merchandise dispatch times increased.


Nombre Aduana   Nuevo Laredo   Seleccione una aduana

Tiempo total para realizar los reconocimientos (Minutos)

Minutos — Mes y/o Año

2019: ene 2,745,714 · 8,888,023 · 14,811,382 · 19,853,236 · 25,595,460 · 31,216,551 · 35,754,649 · 41,744,786 · 46,444,488 · 51,061,181 · 55,905,533 · 60,206,269

2020: ene 4,436,314 · 12,468,500 · 19,371,124 · 22,356,507 · 24,608,752 · 30,346,460 · 37,002,118 · 43,853,908 · 50,078,372 · 58,320,488 · 66,819,187 · 76,363,804

Analysis

3. Study cases

The COVID-19 pandemic has presented rare opportunities to commit fraud. For example, a Florida man obtained loans under the Paycheck Protection Program (PPP) valued at $3.4 million by submitting false IRS records.

PHTHALATES

Development

Reproductive System
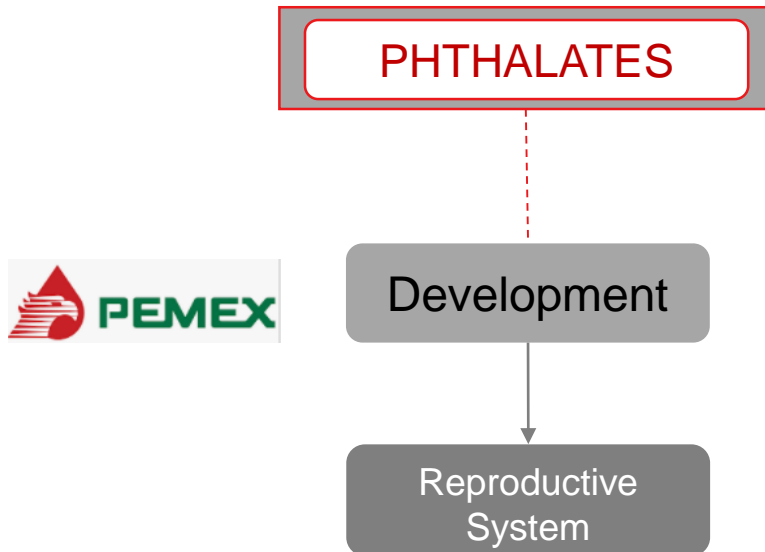
Phthalates

What Products Are Phthalates Found In?

You can find them in things like:

- Vinyl flooring
- Adhesives
- Building materials
- Cosmetics and personal care products such as perfume, nail polish, hair spray, soap, shampoo, and skin moisturizers
- Detergents
- Insecticides
- Lubricants
- Plastic plumbing pipes
- Medical tubing and fluid bags
- Shower curtains
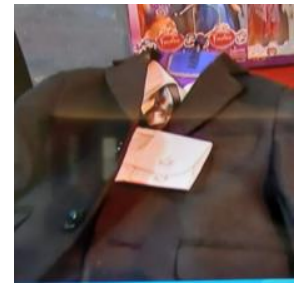- Solvents
- Wood finishes

What Foods Are High in Phthalates?

Foods linked to higher phthalate levels include:

- Restaurant, cafeteria, and fast foods
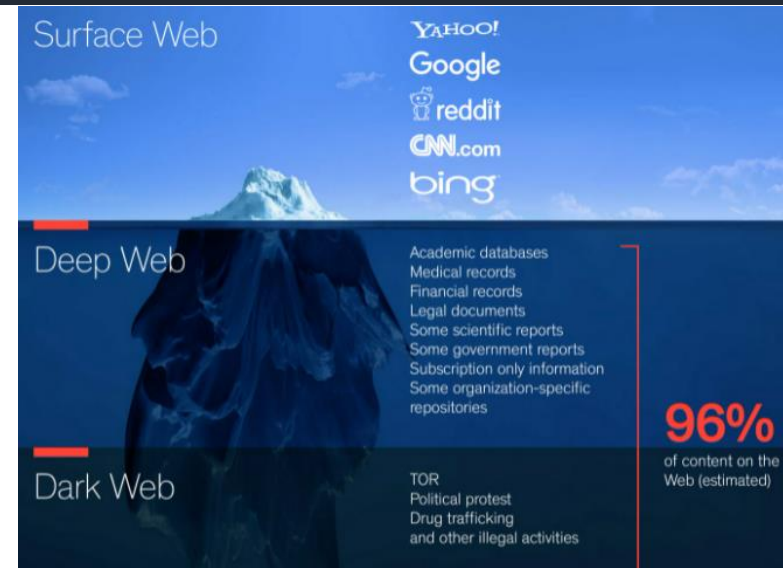- High-fat dairy
- Fatty meats and poultry
- Cooking oils

4. Dark Web Analysis

| Company has a real address and pohone number | Buy from reputable stores and websites. | And if the price is good to be true? |

MONEY FUNDS
-TERRORISM
-HUMAN TRAFFIC

100 PARTS PER MILLION

https://public.tableau.com/app/profile/federal.trade.commission/viz/COVID-19andStimulusReports/FraudLosses

Options

- Lists of hidden services and search engines
- Financial market
- Marketplace commercial services
- Market drugs
- Hosting
- Blogs
- Forums and chains
- Email and political messaging
- Hack
- Warez
- Erotic 18-
- No English
- TOP 50

Surface Web
YAHOO!
Google
reddit
CNN.com
bing

Deep Web
Academic databases
Medical records
Financial records
Legal documents
Some scientific reports
Some government reports
Subscription only information
Some organization-specific repositories

96%
of content on the Web (estimated)

Dark Web
TOR
Political protest
Drug trafficking
and other illegal activities

The COVID-19 pandemic and the fraud

- The COVID-19 pandemic has opened the door for criminals to defraud state and federal government programs.
- Fraud investigators at both the state and federal levels have found hundreds of instances of fraud in relief programs.
- Three ways fraud investigators can benefit from automated data visualization in their pandemic-related fraud investigations.

Recomendation:

1. Solve faster

Time is money. During the COVID-19 pandemic, time can also cost lives and extend the economic downturn.

2. Organize the information

Organize the information Create a timeline and visualize the information, there are many help tools

3. Create formats (structured information)

Ultimately, the goal of your investigation is to prepare the evidence that will help you identify criminal activity.
You must know the laws and regulations

WORLD CUSTOMS ORGANIZATION

Analysis and study the case

Parallel interviews

Review of evidence

Learned lessons

| January | February | March | April | May | June | 2021 |

Request information

Review of evidence:
- Chats,
- E-mails,
- Images,
- Documents,
- Forense audit
- Social networks
- Calls
- Video camaras
- User account

Timeline

Artificial Intelligence in México

Microsoft has selected the state of Querétaro for its first Azure region in Mexico.
The first Azure region in Mexico within the next five years as part of a $1.1 billion investment initiative.

Currently

Free training to thousands students of public Universities in Artificial Intelligence and Data Science.

Artificial intelligence is being hailed as the future of business, from the way companies manage their supply chains and deal with legal issues, to how companies anticipate and meet consumer demand.

Data Analytics Artificial Intelligence
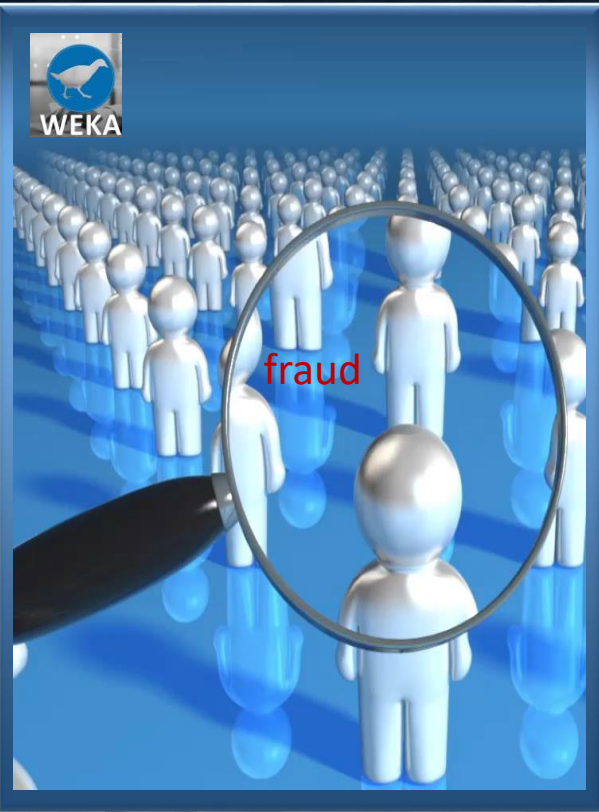
While some of this change is likely due to increased efforts on behalf of anti-fraud professionals and more internal conversations around fraud risks, heightened press coverage of pandemic-related fraud schemes might also have contributed to the increase in fraud awareness.

Conclusion:

- Data analytics and artificial intelligence can help us prevent risk health situations and fraud.
- Incorporate the subject of data science from basic education to sensitize children in the use of information.
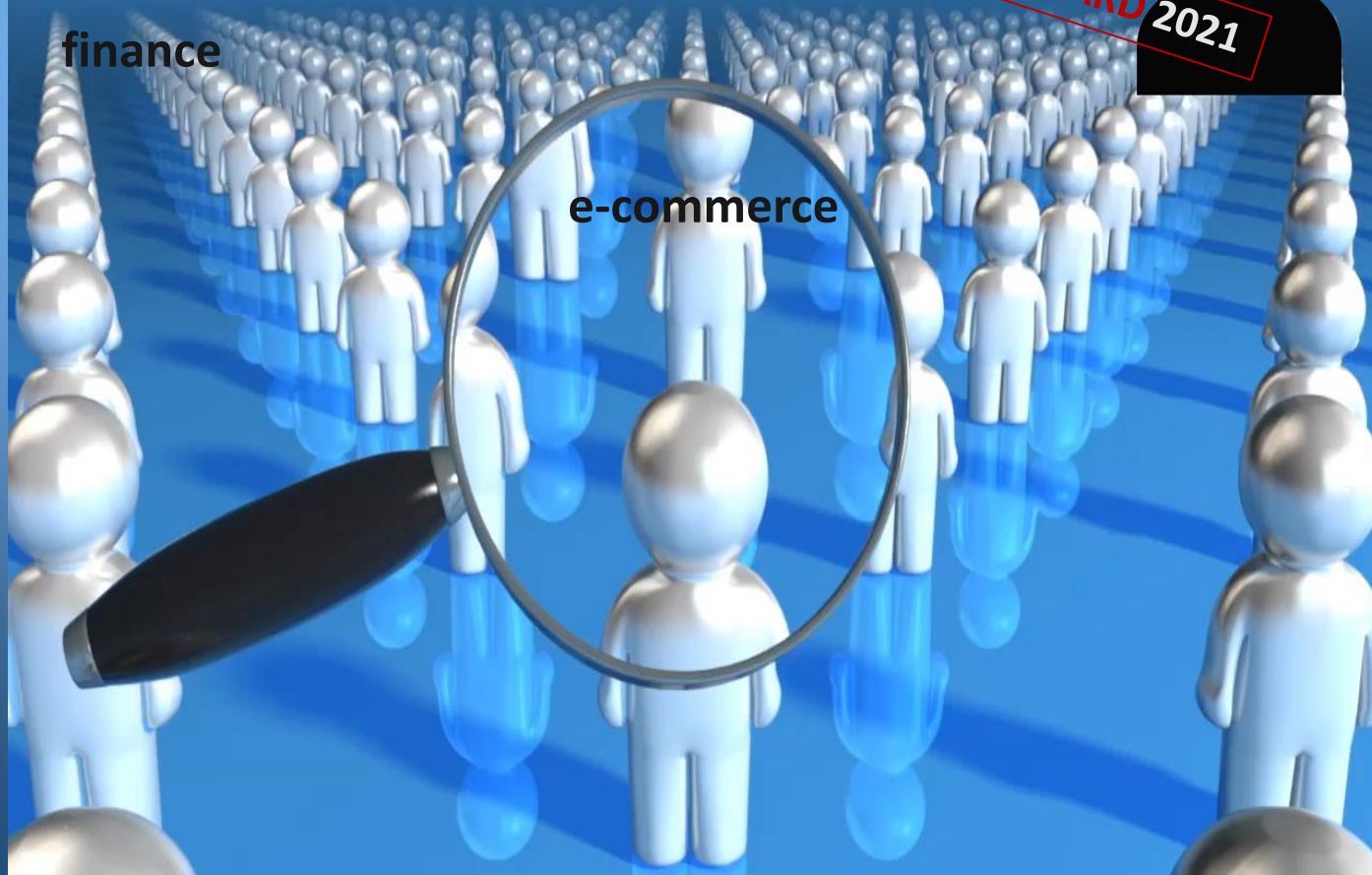- Fight fraud with a culture of legality.

México

María Elena Chávez Solís