

# FinTech Platforms

Recognition and Investigation

**Loughnane Associates LLC**  
*Value Touches Everything*



1

## Learning Objectives

- General objective: enable law enforcement investigators to identify the nature and purpose of FinTech products and services and how criminal or threat networks can exploit them.
- Enabling objective (EO) one: identify the various FinTech services and products operating within the financial markets.
- EO two: identify the FinTech most commonly exploited by criminals and threat actors.



2

# What are they?



3

## Definition

- FinTech is a catch-all term.
- It refers to financial products and services that operate using software, mobile applications, and other technologies designed to improve and automate traditional forms of financial transactions and storage of assets.
- Businesses, organizations, and retail consumers use FinTech products.
- FinTech is emerging as new means to service customers' financial needs.



4

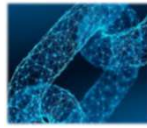
# Fintech Industry Products & Services



Peer-to-peer (PSP) lending



Budgeting apps



Blockchain technology



Brokerage services



P2P bank transfers



Online & mobile banking



P2P Mobile payments



Robo advising



E-commerce



Telecom financial

Training Purposes Only

©2023 Loughnane Associates LLC  
www.loughnaneassociates.com



5

# Fintech Industry Products & Services



Peer-to-peer (PSP) lending



Budgeting apps



Blockchain technology



Brokerage services



P2P banking transfers



Online & mobile banking



Mobile payments



Robo advising



E-commerce



Telecom financial

Training Purposes Only

©2023 Loughnane Associates LLC  
www.loughnaneassociates.com



6

## How Can They be Exploited?

- Each product has its associated risk of being exploited by different criminals based on their role, hierarchy within their DTO, or responsibilities.

As investigators, we must:

- Identify the products and services used by suspects.
- The financial institution that offers the FinTech platform.
- How to identify the platforms used by the suspect. (brand recognition)
  - Hardware used.

Training Purposes Only

©2023 Loughnane Associates LLC  
www.loughnaneassociates.com



7

## High Exploitability



- Blockchain technology is the backbone infrastructure used for virtual currencies and digital asset management and commerce.
- DTOs and other criminal groups or players are increasingly exploiting this FinTech.
- This is a specialized field of investigation.
- Investigators should be able to detect and identify blockchain technology used by criminals

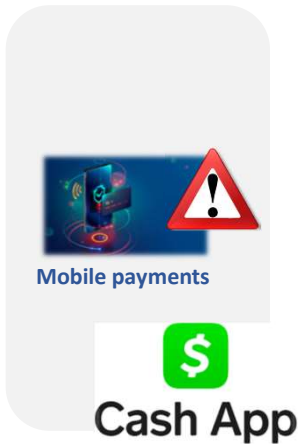
Training Purposes Only

©2023 Loughnane Associates LLC  
www.loughnaneassociates.com



8

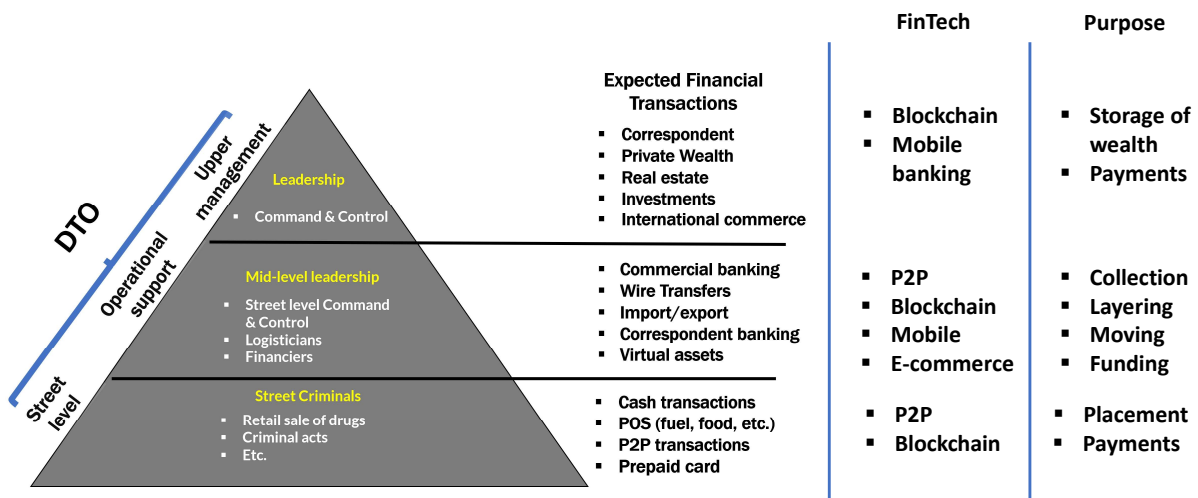
# High Exploitability



- Mobile payments are becoming common are FinTech platforms used by street-level criminals to send proceeds to another DTO member who collects earnings from drug sales.
- Cellphones become important hardware to look at or investigate.



# DTO Use of Fintech by Organizational Hierarchy



# An Example

From an Investigator's Point of View



Training Purposes Only

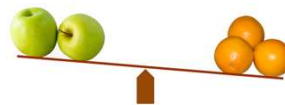
©2023 Loughnane Associates LLC  
www.loughnaneassociates.com



11

# Understanding the Exploitability

- Each product and service has an intended legitimate purpose and market.
- The investigator must benchmark the suspect's financial transaction with legitimate activity.

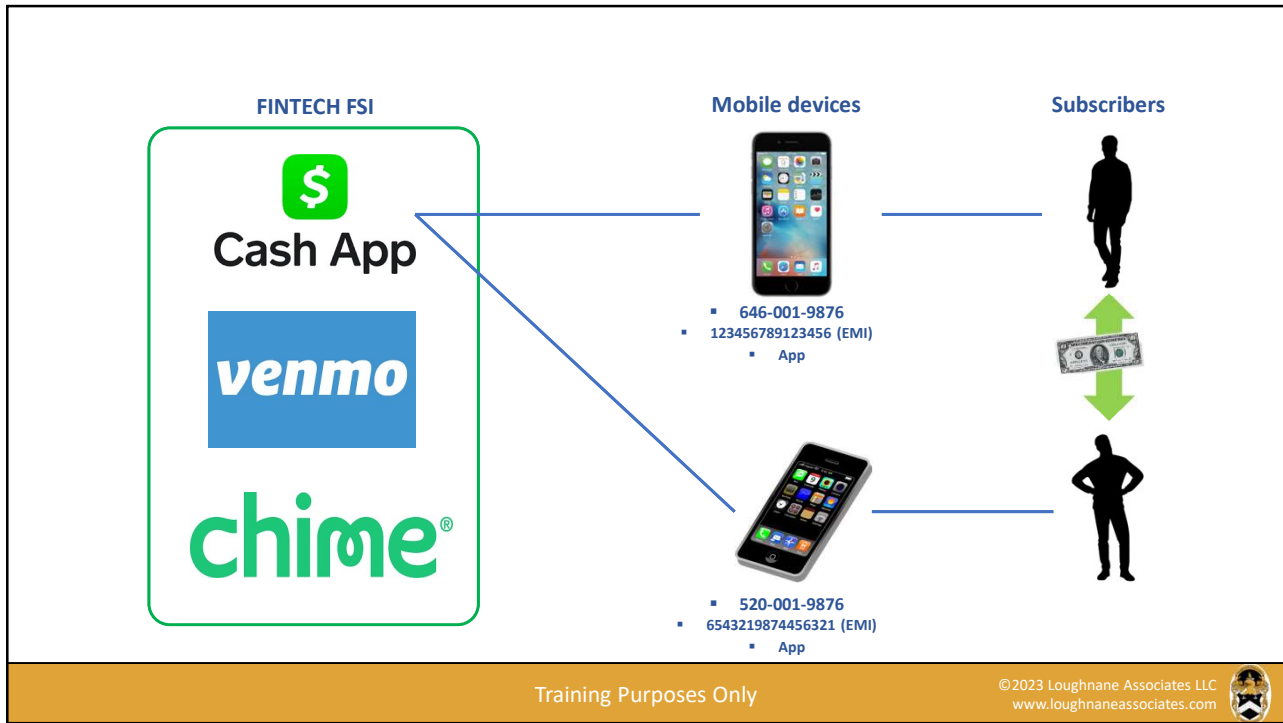


Training Purposes Only

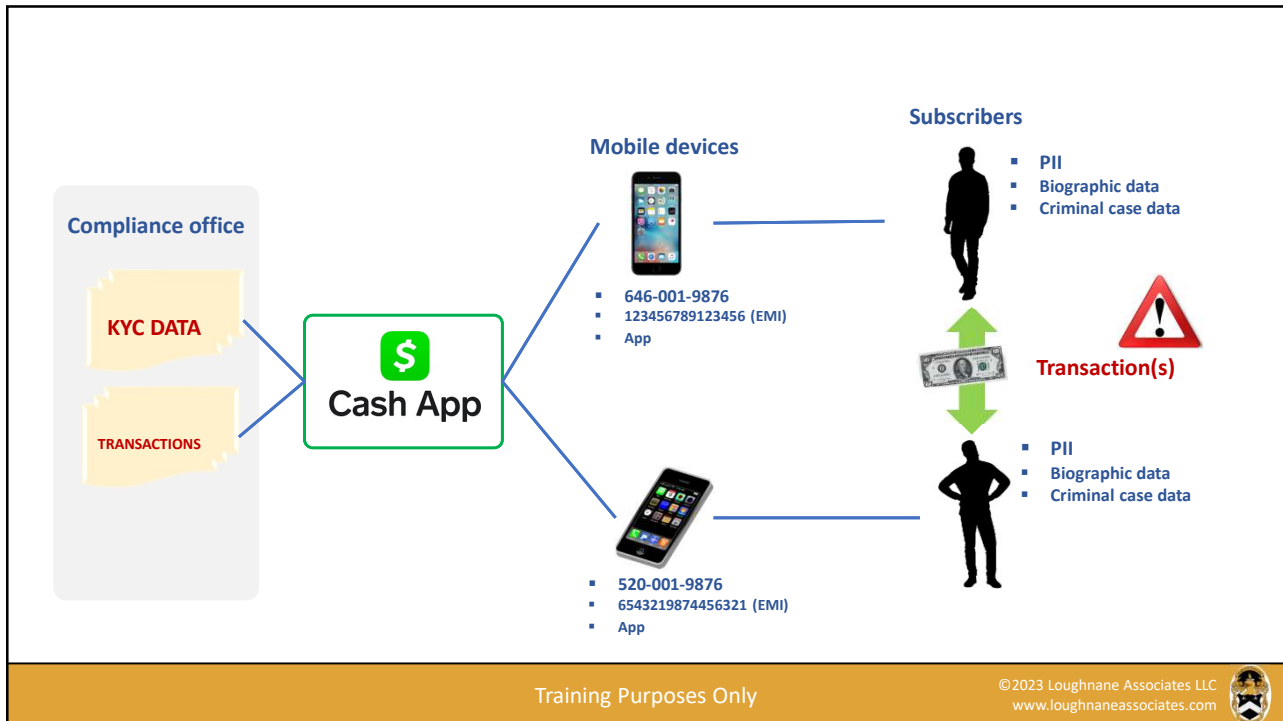
©2023 Loughnane Associates LLC  
www.loughnaneassociates.com



12

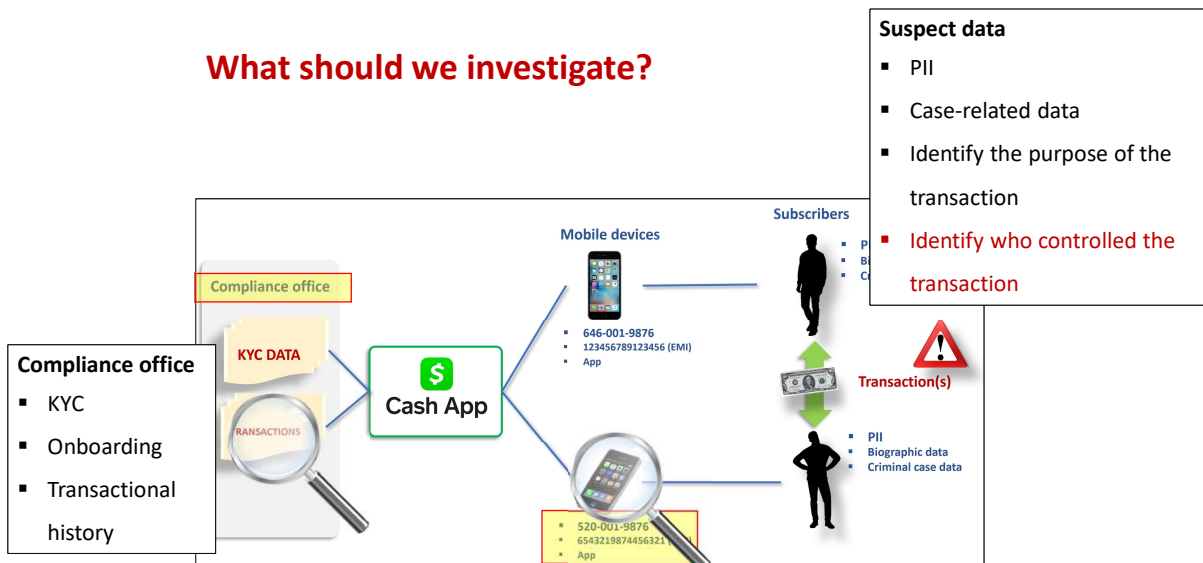


13



14

## What should we investigate?

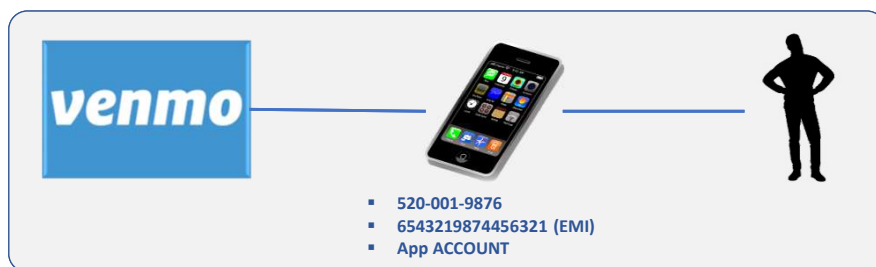


Training Purposes Only

©2023 Loughnane Associates LLC  
www.loughnaneassociates.com



15



### The crucial and initial questions to ask

- How and by whom is the account funded?
- What are the financial links? (inbound & outbound transactions)
- What is the account activity behavior?
  - Patterns, trends & anomalies



Training Purposes Only

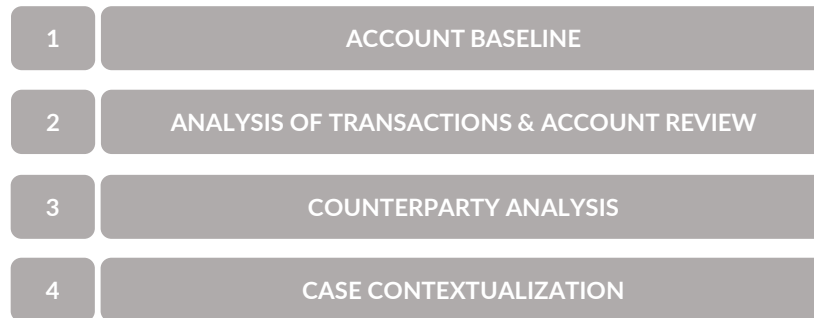
©2023 Loughnane Associates LLC  
www.loughnaneassociates.com



16



## Four for Fintech Data Review



Training Purposes Only

©2023 Loughnane Associates LLC  
www.loughnaneassociates.com



17

## Account Baseline

- We need to understand:
- What is the purpose that the suspect opening the account?
  - Ask the suspect and the FinTech platform (KYC and onboarding data) and compare with transactional information
- Transactional analysis will validate the explanation and data.

Training Purposes Only

©2023 Loughnane Associates LLC  
www.loughnaneassociates.com



18

# Analysis of Transactions & Account Review

We need to understand:

- How is the account funded
- Identify and explain flows of funds
- Identify patterns, trends, and anomalies within transactional history
- What is being paid for



Date	Open	Close	High	Low	Volume
04/01/2008	199.5	180.05	200.5	178.89	1398718
11/01/2008	181.25	172.69	183.6	168.3	2901840
18/01/2008	177.52	161.36	179.42	156.7	3264206
25/01/2008	148.00	130.01	159.98	126.14	3345832
01/02/2008	128.10	133.75	136.65	126.45	2205106
08/02/2008	134.21	125.48	135.9	117.27	2518876
15/02/2008	128.01	124.63	131	123.62	1875480
22/02/2008	125.99	119.46	126.75	115.87	1585885

Training Purposes Only

©2023 Loughnane Associates LLC  
www.loughnaneassociates.com

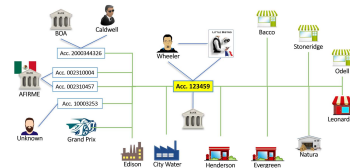


19

# Counterparty Analysis

We need to understand:

- The financial associations between the suspect's account and other FinTech user accounts exist.
- The nature of the financial association.
- The associated geographies of the counterparties (other users financially connected with the suspect).



Training Purposes Only

©2023 Loughnane Associates LLC  
www.loughnaneassociates.com



20

## Case Contextualization

- We need to understand:
- How the account activity compares with the rest of the information about the criminal investigation.
- Historical data about how other DTOs have used the same or similar FinTech platforms.



Training Purposes Only

©2023 Loughnane Associates LLC  
www.loughnaneassociates.com



21

## Brand Recognition



Training Purposes Only

©2023 Loughnane Associates LLC  
www.loughnaneassociates.com



22

# Brand Recognition

- As investigators, we must be aware that many FinTech platforms are available, used by legitimate customers, but also by criminals.

We must be able to identify logos, insignia, apps, programs, etc.; otherwise, we might lose an opportunity to progress the investigation. **We don't need to know them all; just be curious enough...**



Training Purposes Only

©2023 Loughnane Associates LLC  
www.loughnaneassociates.com



23

# Fintech Industry Products & Services



Training Purposes Only

©2023 Loughnane Associates LLC  
www.loughnaneassociates.com



24

# Brand Recognition

- Don't dismiss anything...
- It might mean something!



Training Purposes Only

©2023 Loughnane Associates LLC  
[www.loughnaneassociates.com](http://www.loughnaneassociates.com)



25

# Questions?



**Loughnane Associates LLC**  
*Value Touches Everything*

26