



# Cybersecurity in E-commerce Ecosystem: Practice from Alibaba

**Yuejin Du. Ph.D**

VP and Chief Security Expert of Alibaba Security

2017.04.24@Geneva

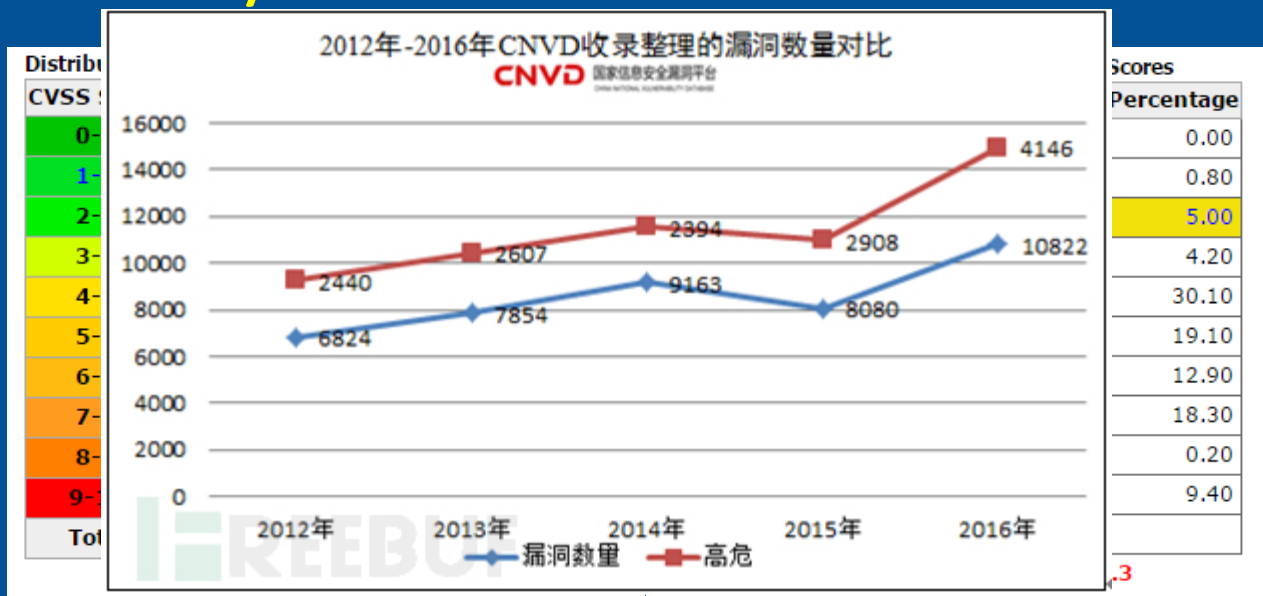
## Key Challenges for E-commerce Today

1. **Tech. side:** loopholes never can be fixed
2. **Human side:** weakest link always there
3. **Opponent:** highly organized and technologized,  
***and globalized***

# Vulnerability: a war never ends

2016:  
CVE: 6435  
(2017S1: 3442)

CNVD: 10822  
Increased 34%  
compare with 2015%



# The Truth is : nobody knows the truth



- Common Vulnerability;  
Product Vulnerability;  
Vulnerability in your own  
Apps. ....
- How and when do you  
know yours? Esp. for SMEs?
- And, can you fix it or avoid  
it

# Humans are always the weakest link

- Moles in sellers/merchants
  - The 'underground black economy' send groups of their people to get jobs from sellers
  - Bribe employees
- Moles in logistics provider
  - Photos taken of shipping slips
- Voluntary leaker of info
  - There is a market for buying and selling of merchant info



¥100 billion

# Our Opponents: big, organized, advanced, globalized

- Platforms of exploiting vulnerabilities
- Platforms of 'account collision' and commercial tools
- synthesizing info from multiple sources
- organizing the entire criminal chain: obtain info; sell info; supply chain of SIM cards for defrauding victims; phishing website construction; money laundry; etc.



1~2 million

# Our countermeasure

1. Technology
2. Ecosystem building
3. Co-work with LEA

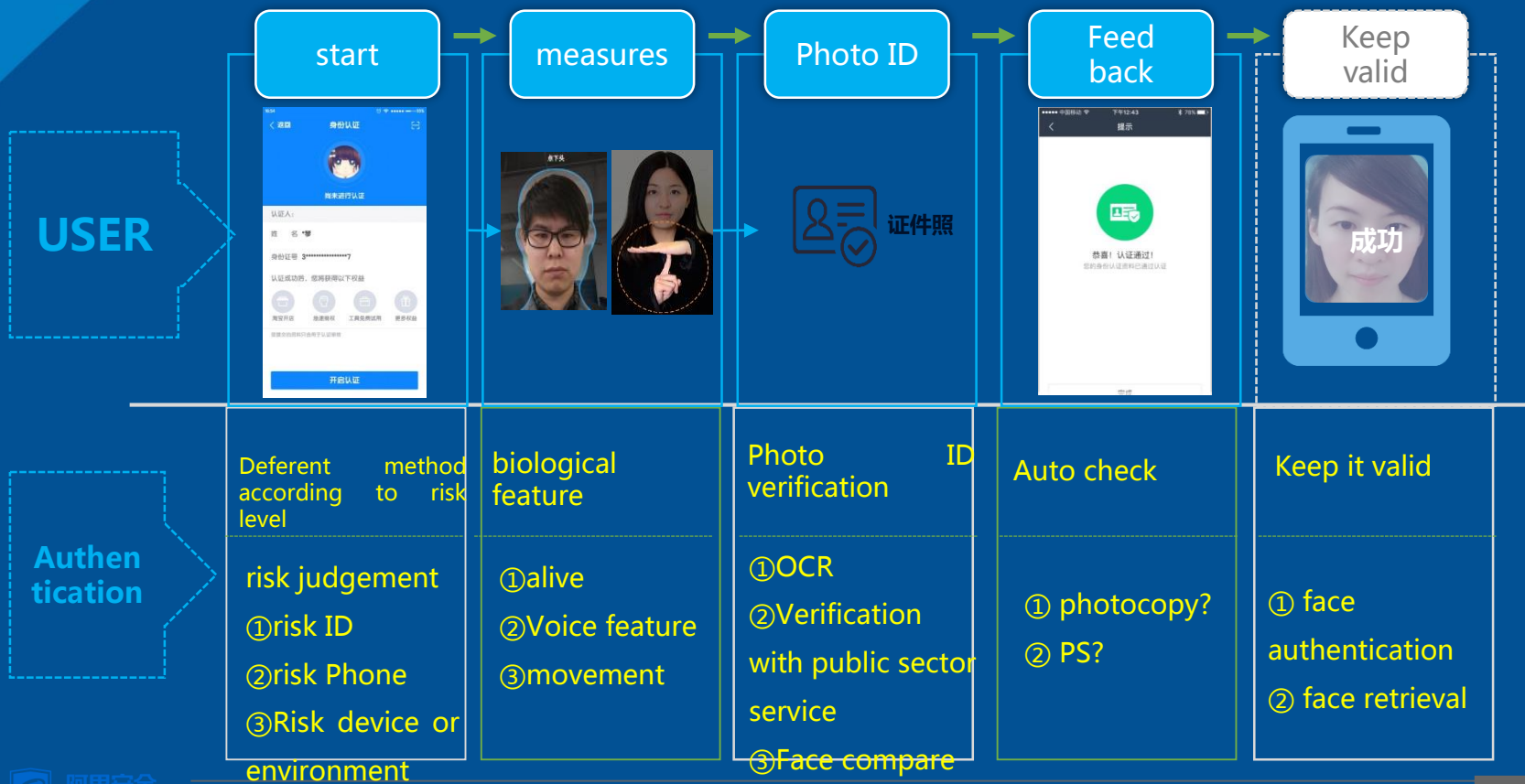


## Some Technologies and Products

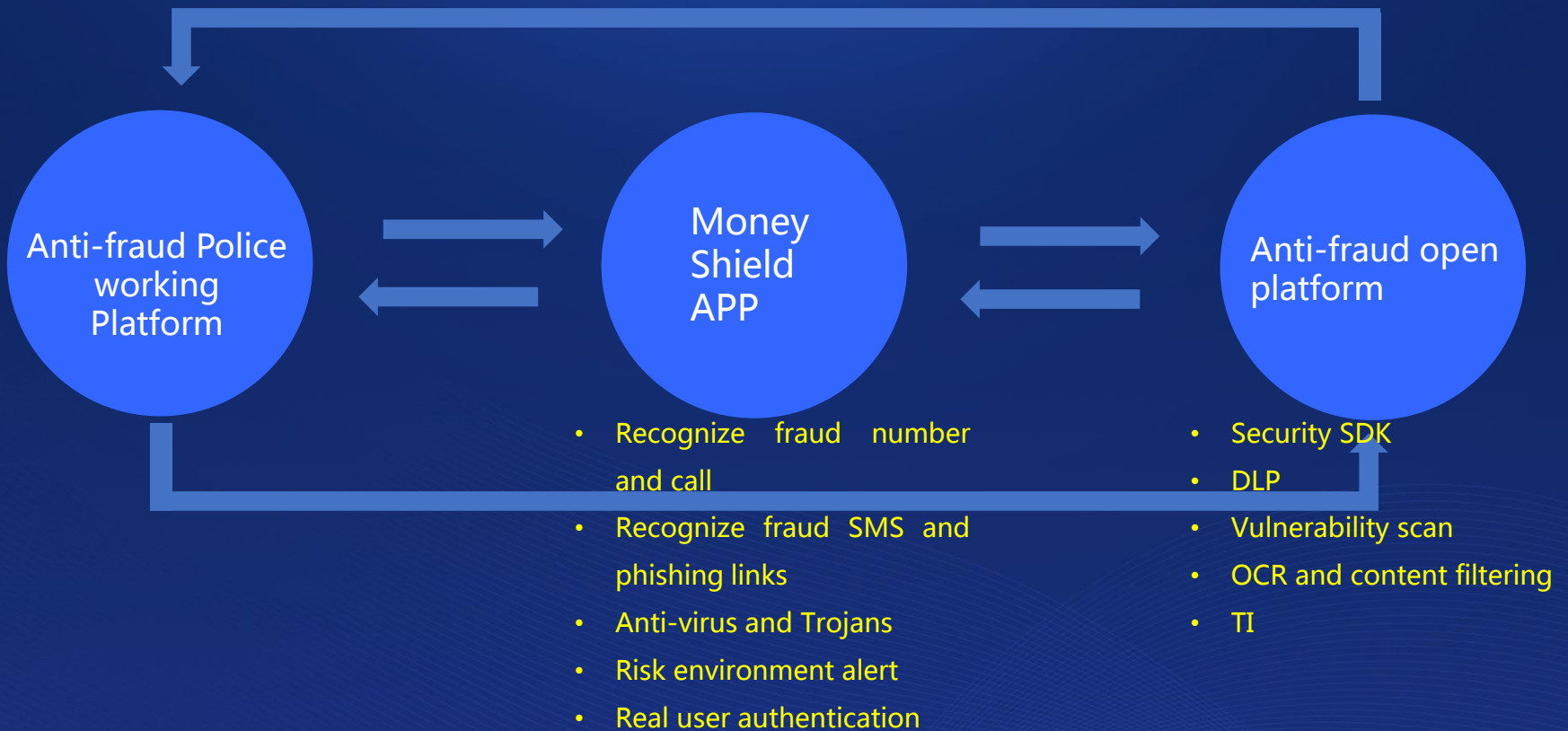
1. Trusted authentication and account safety
2. “City Moat”: the guardian of merchant
3. “Money Shield”: anti-fraud platform
4. ASRC and Threat Intelligence
5. DSMM: Data Security Maturity Model



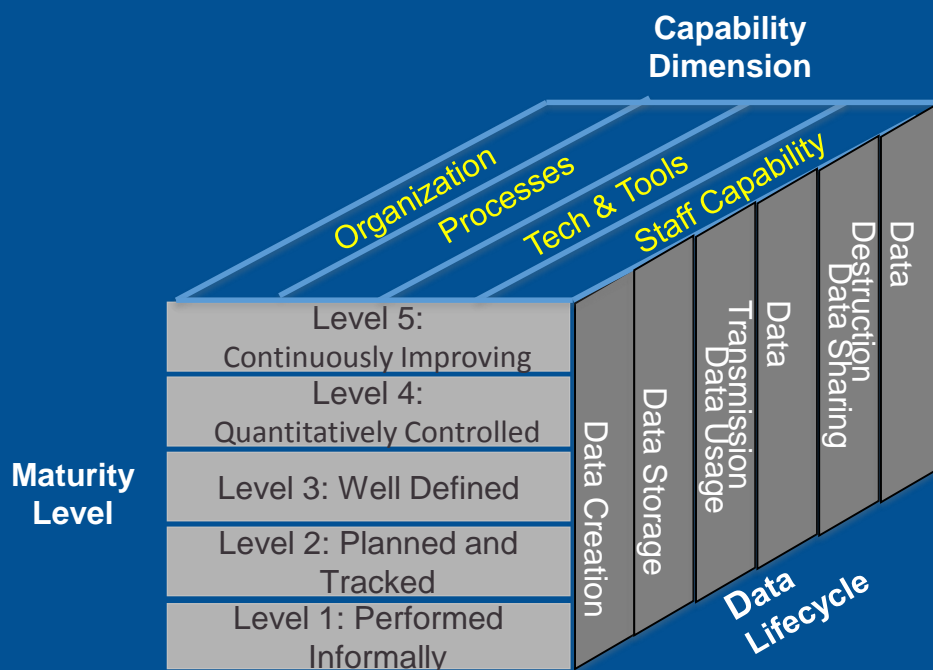
# Multi-factor real-people-authentication



# 'money shield' anti-fraud public welfare platform

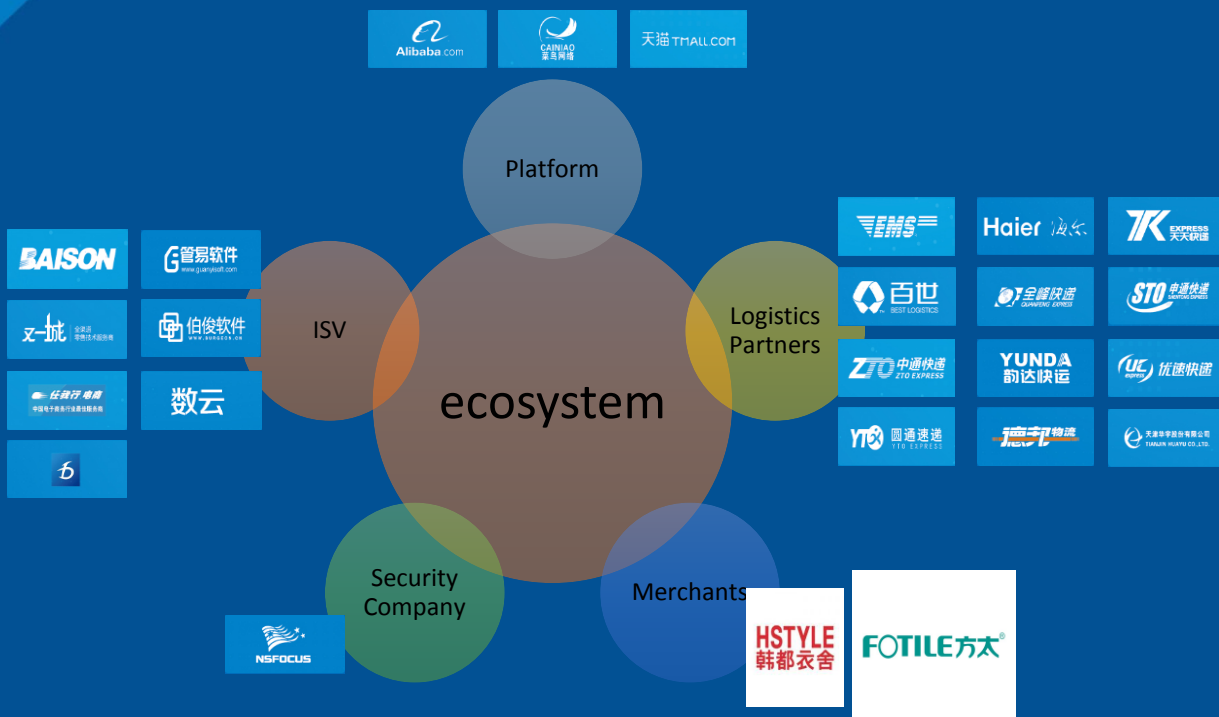


# Data Security Maturity Model



- Standards
- Practices

# Security Alliance of E-Commerce Ecosystem



# LEA is the inevitable power



Your own security



Let criminals pay

We reported more than 350 clues of black underground economy in 2016. The police finally arrested about 2800 criminal suspects



*Thanks*

[yuejin.dyj@alibaba-inc.com](mailto:yuejin.dyj@alibaba-inc.com)