FIGI Security Clinic

Cognitive Continuous
Authentication
Jorge Coelho

4-5 December 2019 #financialinclusion

Sponsored by

BILL & MELINDA GATES foundation





Organized by

Committee on Payments and Market Infrastructures











- FIDO provides password-less, secure authentication
 - It doesn't solve some identity theft issues
- Each authentication attempt should be evaluated based on risk
 - Examples of Risk factors detection:
 - Location
 - Collect the geographical location of the authentication attempt
 - Detect anomalies
 - Device/Browser Fingerprinting (DBFP)
 - Collect the characteristics of the device and browser that are performing the authentication attempt
 - Ex. Browser type, browser version, OS, user-agent, screen resolution
 - Detect anomalies
 - Others (Source IP, Biobehavioral patterns, ...)
 - According to the calculated risk, additional multi-factor authentication steps may or may not be required

Acceptto's Cognitive Continuous Authentication



- Creating a password-less authentication system involves issues that are not solved by FIDO
 - Credential Management (accounts with multiple authenticators, account deletion and recovery, ...)
 - Identity proofing
 - Post-Authorization continuous authentication
- FIDO + Risk Based Authentication + AIML = Acceptto's Cognitive Continuous Authentication
 - Provides a Multi-Factor Authentication system on top of FIDO
 - Access is granted via policies based on sensitivity of transactions and resources
 - AIML engine creates user behavior profiles that ensure additional authentication methods are required if needed
 - Strong user identity proofing (Email, SMS, Device Fingerprint, Corporation Filter, ...)

