Fraud Detection @salesforce

Robert Fly
VP, Product Security

salesforce.com

whoami

- VP, Product Security @salesforce
- Ex-MSFT Senior Security Lead (BPOS)
- Founding member CSA
- Author of ~~crappy~~ book ~~you've never read~~

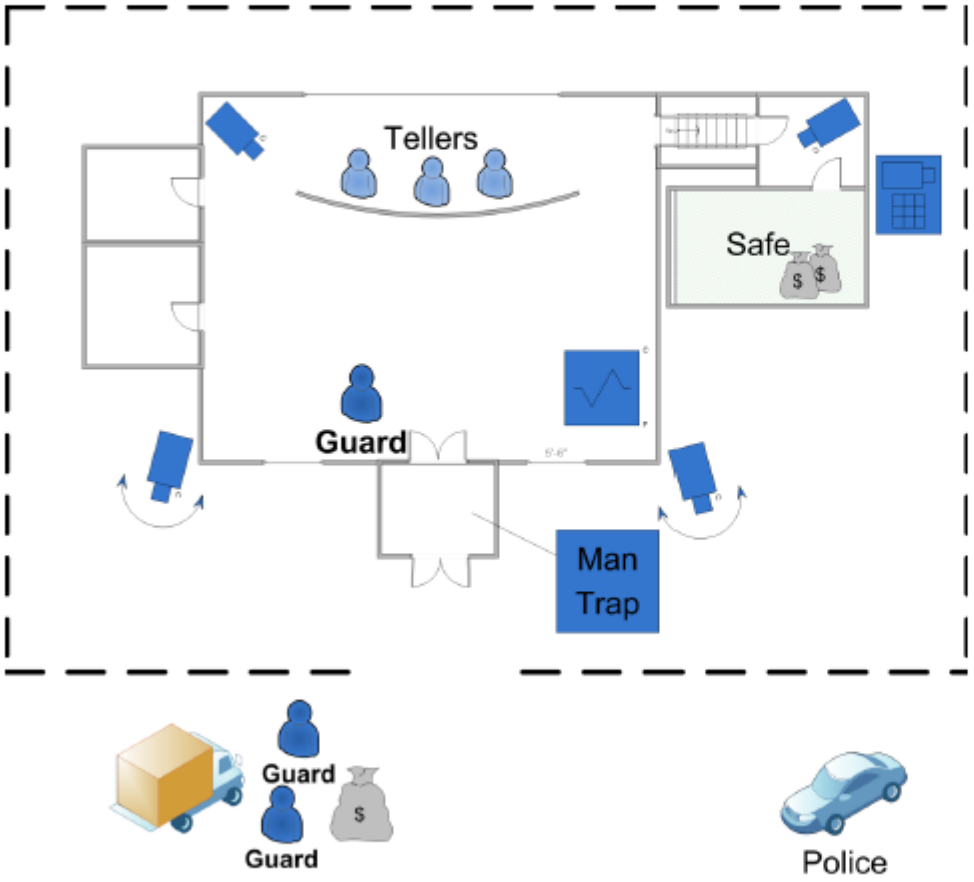

developer.force.com/security


@securecloud dev

@salesforce view of fraud

- Golden Rule: Assume Clients Are Compromised
- Data from Salesforce can be used for:
  - Giant Rolodex
  - Pipeline & Forecasting (Stock Market)
  - Platform (Use Your Imagination)

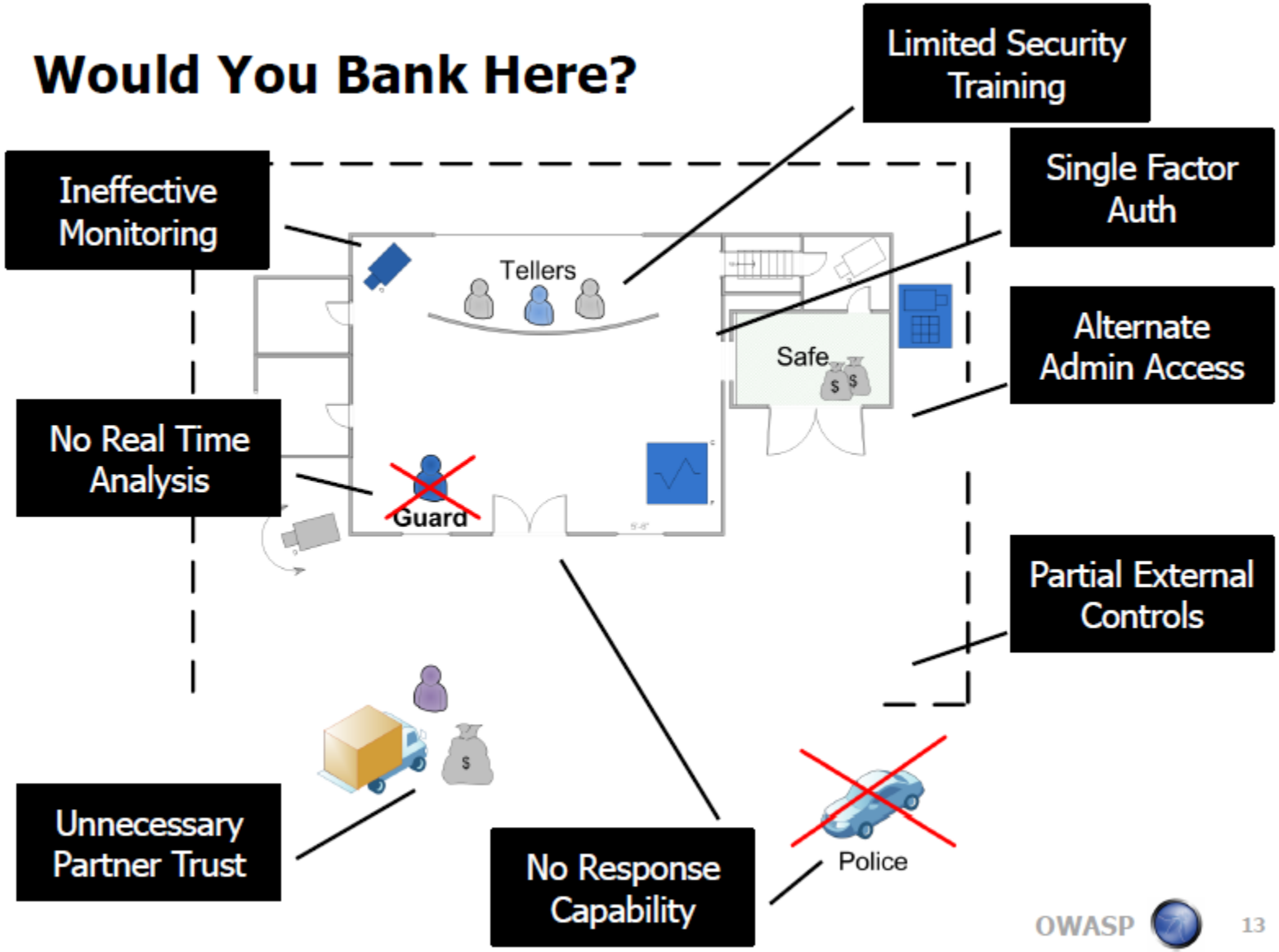
Robbing a Bank



- Physical Controls
- Electronic Monitoring
- Human Monitoring
- Instant Detection and Response
- Controlled Access
- Multi Factor Auth
- Transaction Verification

Attribution: Michael Coates

Would You Bank Here?



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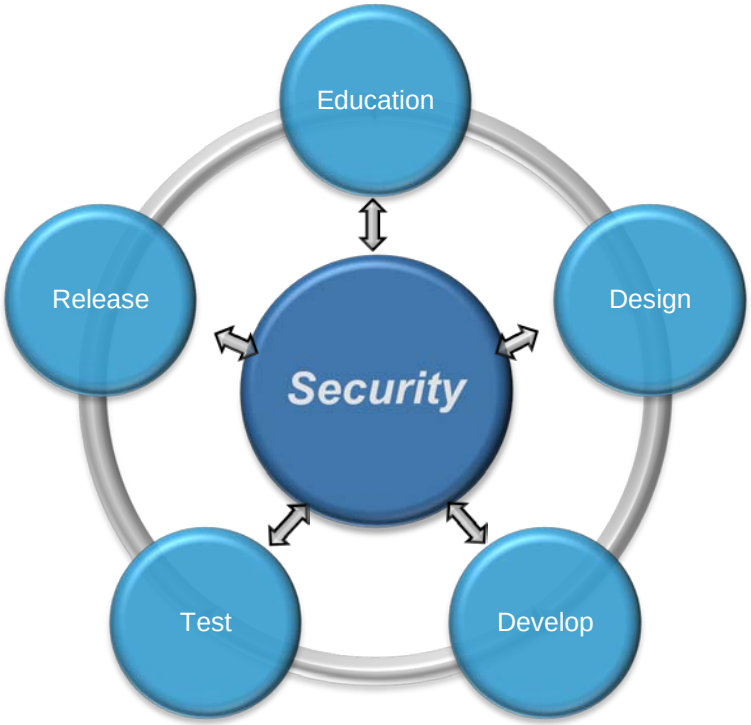
Fraud Detection Points

- Client, Server [active], Server [passive]
- Security Touchpoints (Coding/Design Guidelines, Threat Modeling, QA, external assessments, etc)



Client

- Client Hash Validator
- Client Side Validation
- [recommended] AV, Anti-Malware, etc

Server [active]

Customer Options

- Identity Confirmation
- IP Restrictions, Login Time Restrictions
- Account Locking (15m, 30m, Admin) to prevent Brute Forcing
- SSO Options (Delegated Auth, SAML, Two Factor, etc)
- Fine Grained Authorization
- Custom Domains

Request Oddities

- Cookie Reuse from different client
- One Time Token Reuse
- Chewed Cookie Reuse
- Known malicious strings, odd encodings, etc
- Some Referer Checking

Salesforce Security Options

- Honeypots
- Limits, Limits, Limits…
- URL Blocking, User Lockout, Org Shutdown, App Shutdown

Server [passive]

Customer Security Contacts & Incident Response Process

Logging and Auditing

- Login History
- Administrator Auditing and Logging
- Object Field History Tracking
- Read Level Logging
- Web Logs
- Compromised Credentials

Transactional Anomalies

- Impossible Travel
- Impossible Time Travel
- Multi-Tenant Oddities
  - One IP, multiple orgs
  - Similar Actions, Multiple Orgs within X amount of time
  - Scripted Unauthorized Attacks
  - Feature Overuse

Questions