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# Operationalizing Identity: IAM for Customer Service

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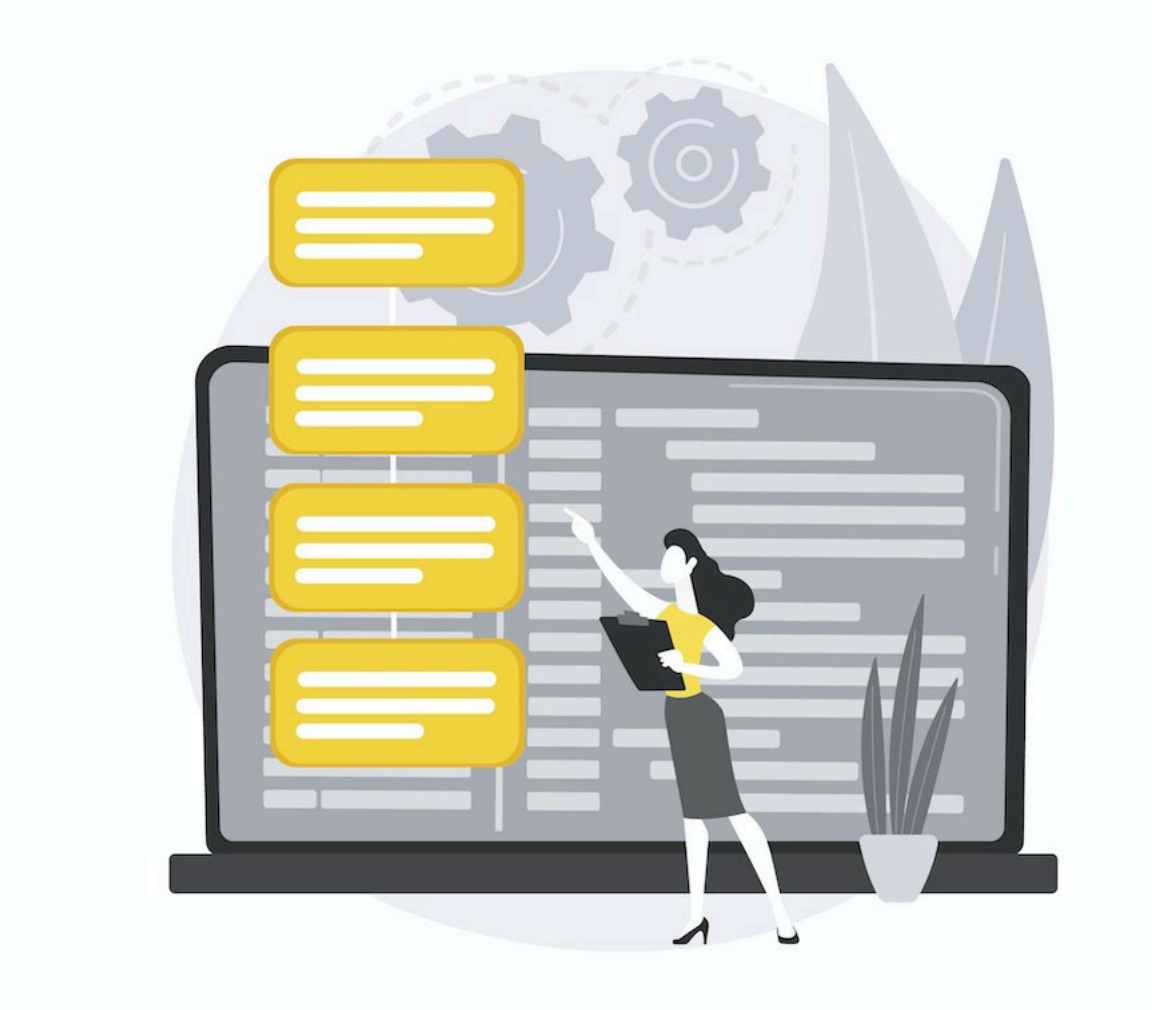
# Welcome!

# So, what are we doing here?

We'll cover…

- Common use cases and risks
- Customer versus workforce considerations
- How to distill these considerations into a plan

# I. Use Cases and Risks



# The Customer Service Landscape

- Customer service is anywhere your customer is interfacing with your organization
- Customers have high expectations, and agents have advanced capabilities to meet those expectations
- High expectations, but communication  channels are limiting

# Common Use Cases

- Seemingly innocuous and transactional – where's my order, replacements
- Help with compliance and data requests
- Configuration help for user or business accounts
- Modifying critical account information – including, when self-service fails, account recovery

# Many Use Cases, More Data Access

- Access to PII, such as…
- Payment and billing data
- Social security numbers, birth dates
- Personal documents – utility bills, driver's licenses, bank statements, etc.

# Agents May Have Advanced Privileges

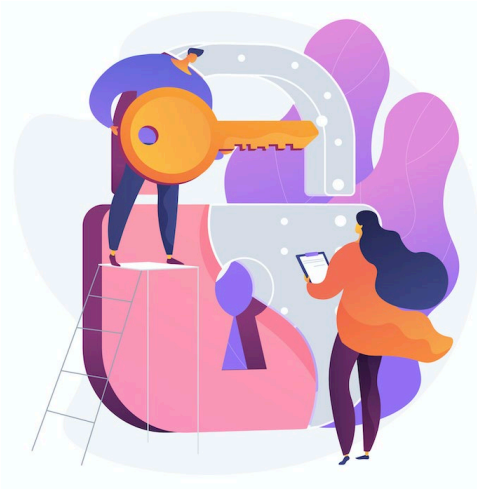
- Add, change, remove payment & billing information

- Modify user credentials

- Change account state or suspend account/ service

- Place orders, take other actions on customer's behalf

# Your objectives are…



## Prevent Account Takeover and Fraud

- Humans are biased to empathy
- Social engineering is increasingly common
- Customer service is the most visible human interface

## Prevent Data Exposure

- Monitor and minimize internal and external access
- Customers in different demographics can have different data sensitivities

# II. Considerations for Customers and Workforces


Customers

Workforce

# Authentication

- Agents determine that customers are who they say they are – this is the primary or only defense for many organizations
- Familiar authentication challenges are complicated by channel –sign-in portal protections may be unavailable
- Customers expect help from anywhere any time. This creates tension between security and satisfaction

# Authentication Methods - Continued

**Knowledge-Based Authentication (KBA)** – weak, but persists due to ease of use

# Authentication Methods - Continued

- **PINs and Passphrases** – May or may not be specific to customer service.
- Customers reuse these, and internal/external actors may replay them

**PIN**

- 931234

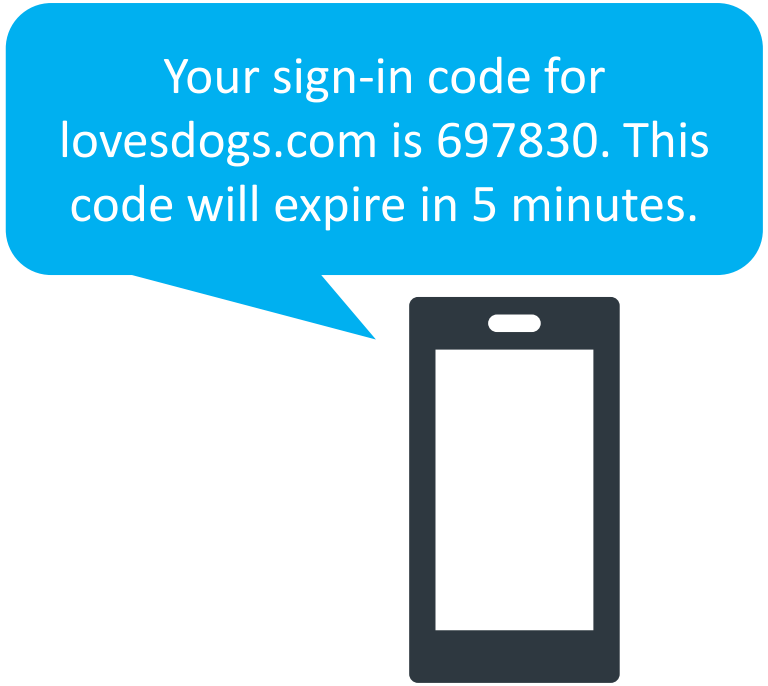
**Passphrase**

- ilovemydog2022

# Authentication Methods - Continued

- **SMS and email OTP** – Persists due to ease and wide availability.

  (May provide incremental assurance over KBA)

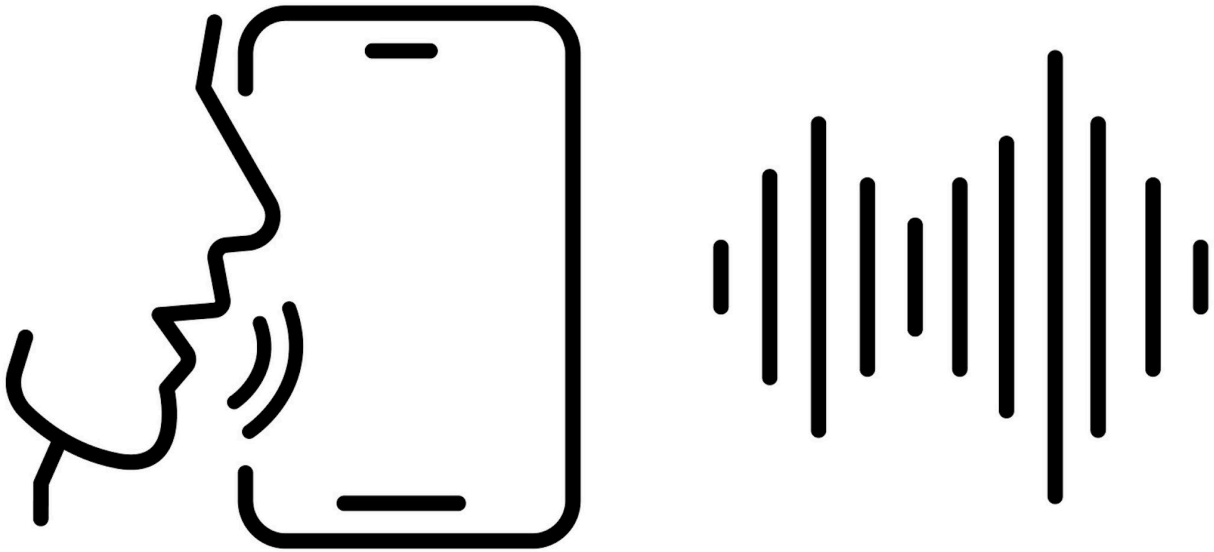


# Authentication Methods - Continued

- **Push notifications** – Easy to use. May also benefit stronger sign-in protections from a mobile app

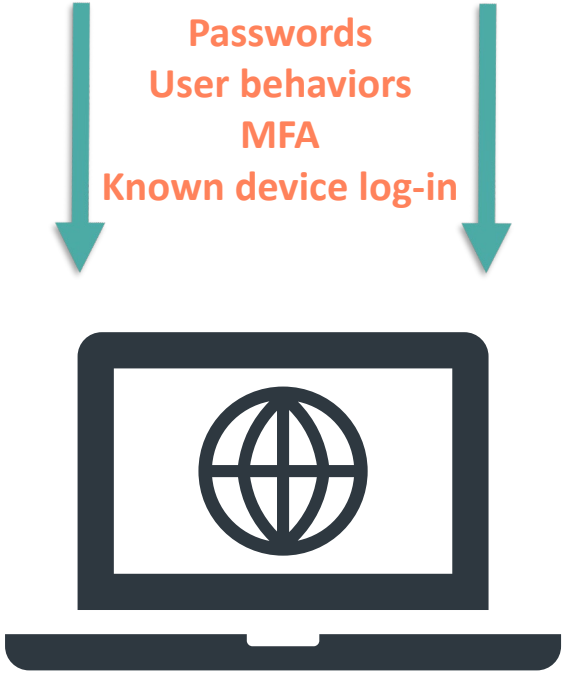
# Authentication Methods - Continued

- **Voice Biometrics** – easy, relatively high assurance, fast and low-friction
- Privacy and implementation caveats

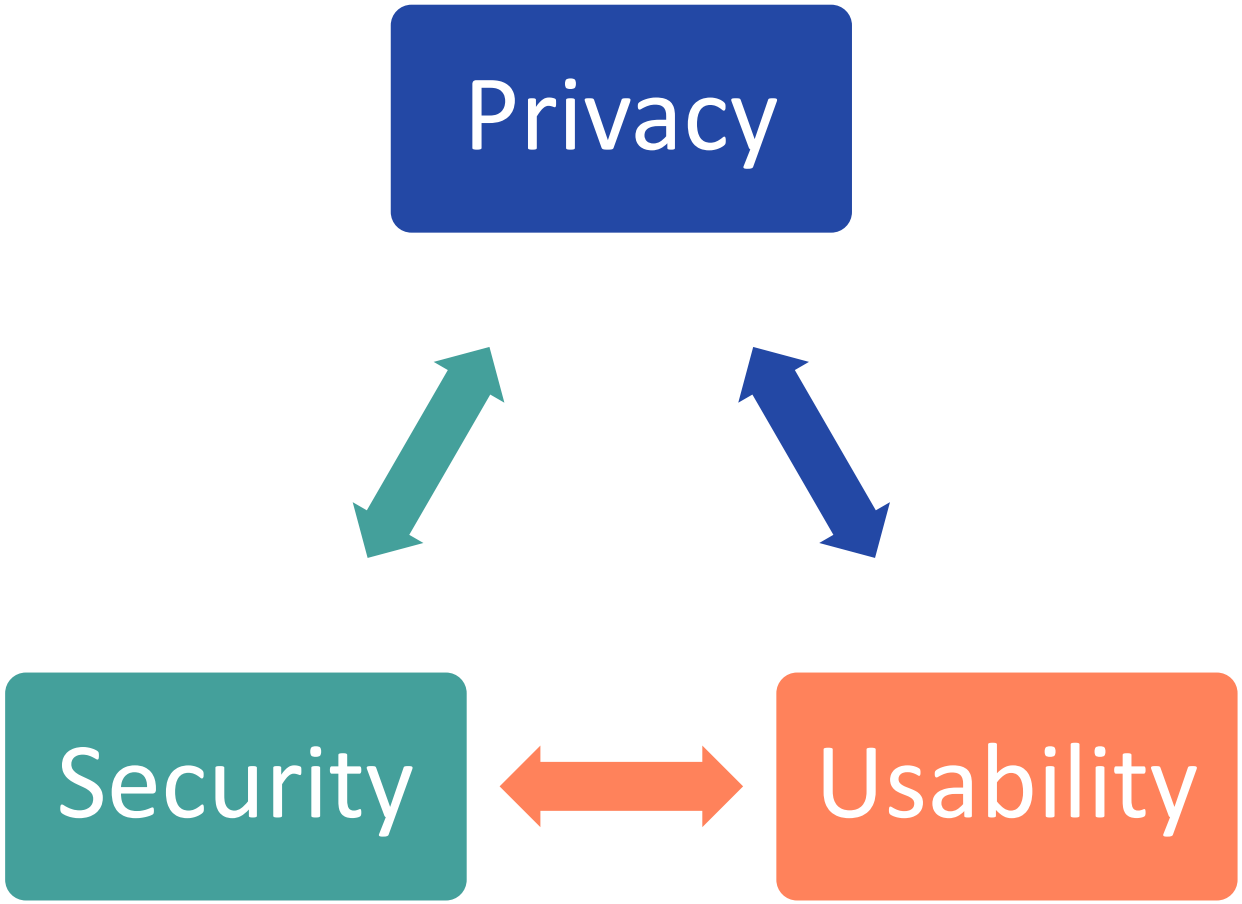


# Authentication Methods - Continued

- **Browser sign-in** – Limited use cases, but benefits from full controls of your authentication stack. Won't work for recovery!

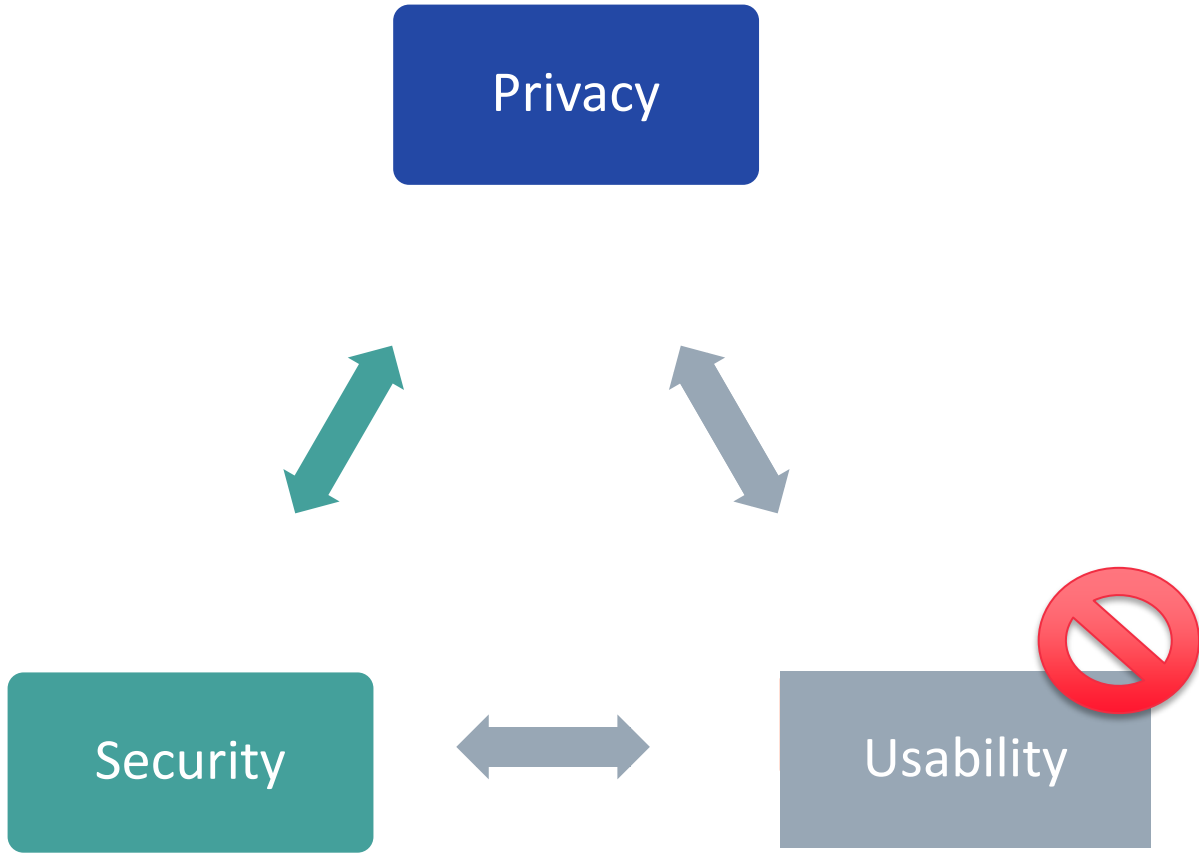


# Deciding what to apply



# Use Force Only as Necessary

- Using the toughest controls in all scenarios may marginally improve posture
- …but it will will also frustrate your operations teams and customers
- Agents are the closest to our customers of any staff



# Assurance Levels Apply

- Authentication assurance – step up authentication applies to customer service, too
- Lower-assurance challenges may be acceptable for lower-risk operations
- Higher-assurance challenges for higher-risk operations

# Automation

- Automating low-level requests reduces costs and risks of manual work
- Automating sensitive functions like account recovery could introduce new risks
- Use automation and dynamic controls to augment processes that require human review

# Your Workforce

# Multi-Factor Authentication

- Users may not have access to USB ports or mobile phones
- OTP tokens are still common in physically constrained environments
- NFC, Bluetooth, etc. may occasionally be used

# Authorization and Access

- Access control can be complicated by unique data sources and high degrees of change, ambiguity in work
- Customer service access requirements are often seasonal/fluid, challenging modern attribute-based access methods
- Overlapping job functions; separation of duties may be poor
- Especially important for RBAC models and organizations with loose hierarchies

# More Complexity - Contractors

- Contractors may not use the same practices, technologies, standards for identity management
- Consider technical interoperability as a requirement, not an implementation detail while selecting vendors

# Putting It All Together

# Map the Current State

- Get to know your customer service stakeholders (agents, management)
- Learn what metrics, KPIs, and current state concerns (call handling time, customer satisfaction)
- Lean on **both** security and operations SMEs to build a threat model

# Build a Risk Management Framework



**Probability**
Rare - 1
Unlikely - 2
Moderate - 3
Likely – 4
Almost Certain - 5

**Impact**
Minimal – 1
Low - 2
Medium - 3
High - 4
Severe - 5

| Risk | Likelihood | Impact | Score | Control |
|---|---|---|---|---|
| **PIN replay** | **2** | **5** | **10** | **Automated entry** |
| **Unauthorized purchase** | **3** | **4** | **12** | **SMS confirmation** |

# Considerations for Change Management

- Customer service is downstream; change is difficult and not fully within their control
- Understand how changes impact the employees – vet solutions with your frontline staff
- When solutions cause churn, people work around them