

# THE DEATH OF PASSWORDS

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***Voice Biometrics Conference***

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# Opportunity for Better Authentication is Upon Us

## *Passwords Just Do Not Work...*

### For Users

#### Painful to Use

- 25 Accounts
- 8 Logins / Day
- 6.5 Passwords



### For Organizations

#### Difficult to Secure

- \$5.5M / Data Breach
- \$15M / PWD Reset
- \$60+ / Token



### For the Ecosystem

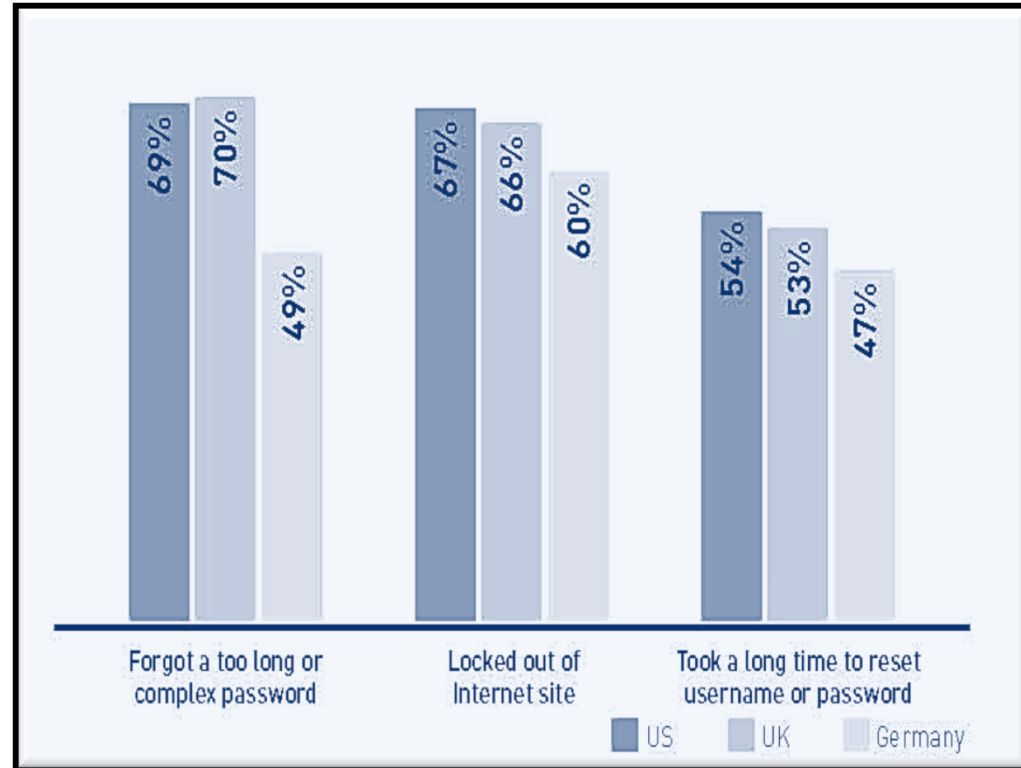
#### Impossible to Scale

- Fragmented
- Inflexible
- Slow to Adopt



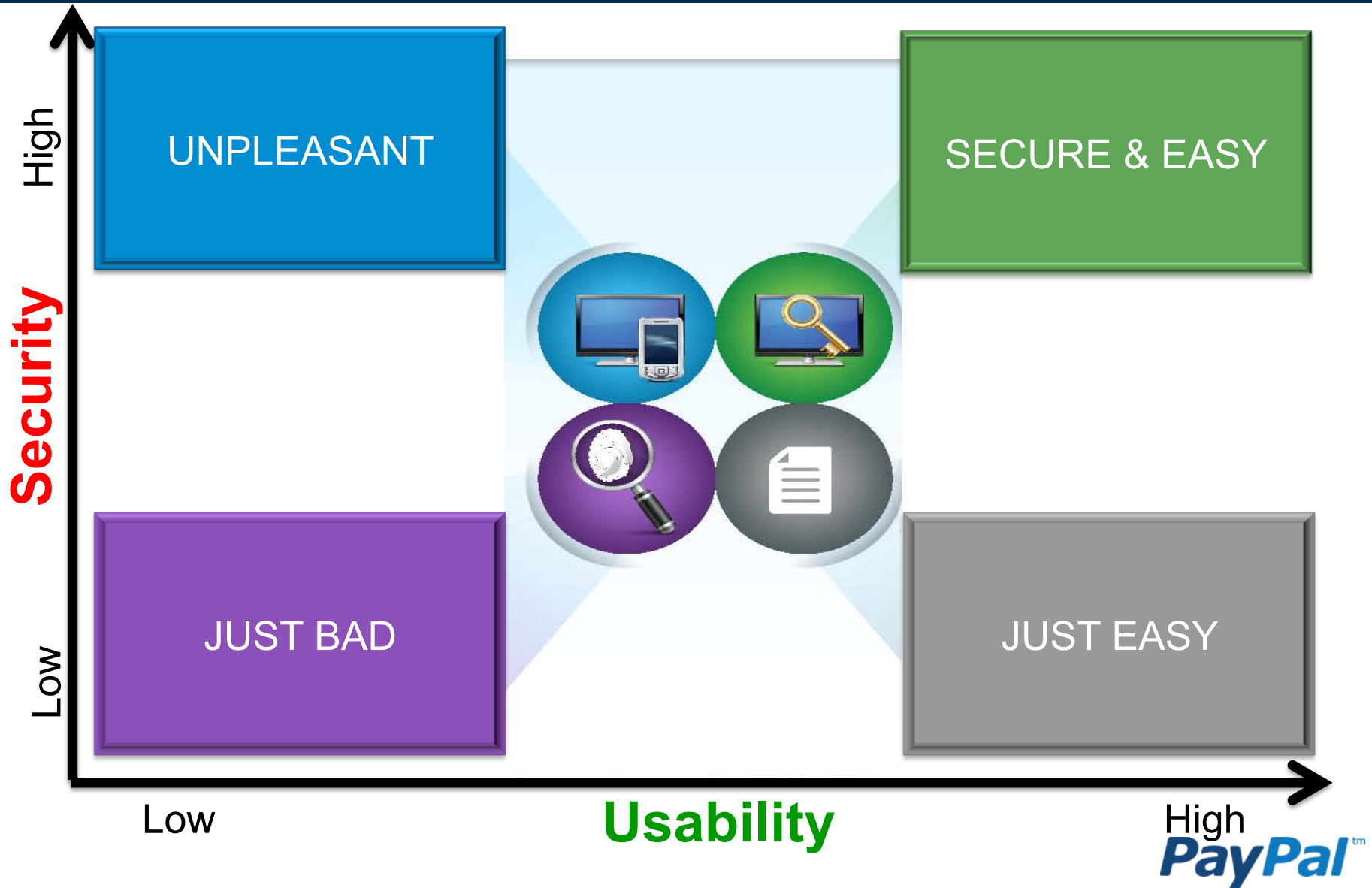
# Experiences with Identity and Authentication

Users are frustrated - password complexity requirements working against them instead of supporting them



Common experiences related to authentication failure (respondents who say it happened to them one or more times over the past 2 years)

# Security is not a Continuum...





# Do You Really Want Your Refrigerator to Know Your *PayPal* Password?



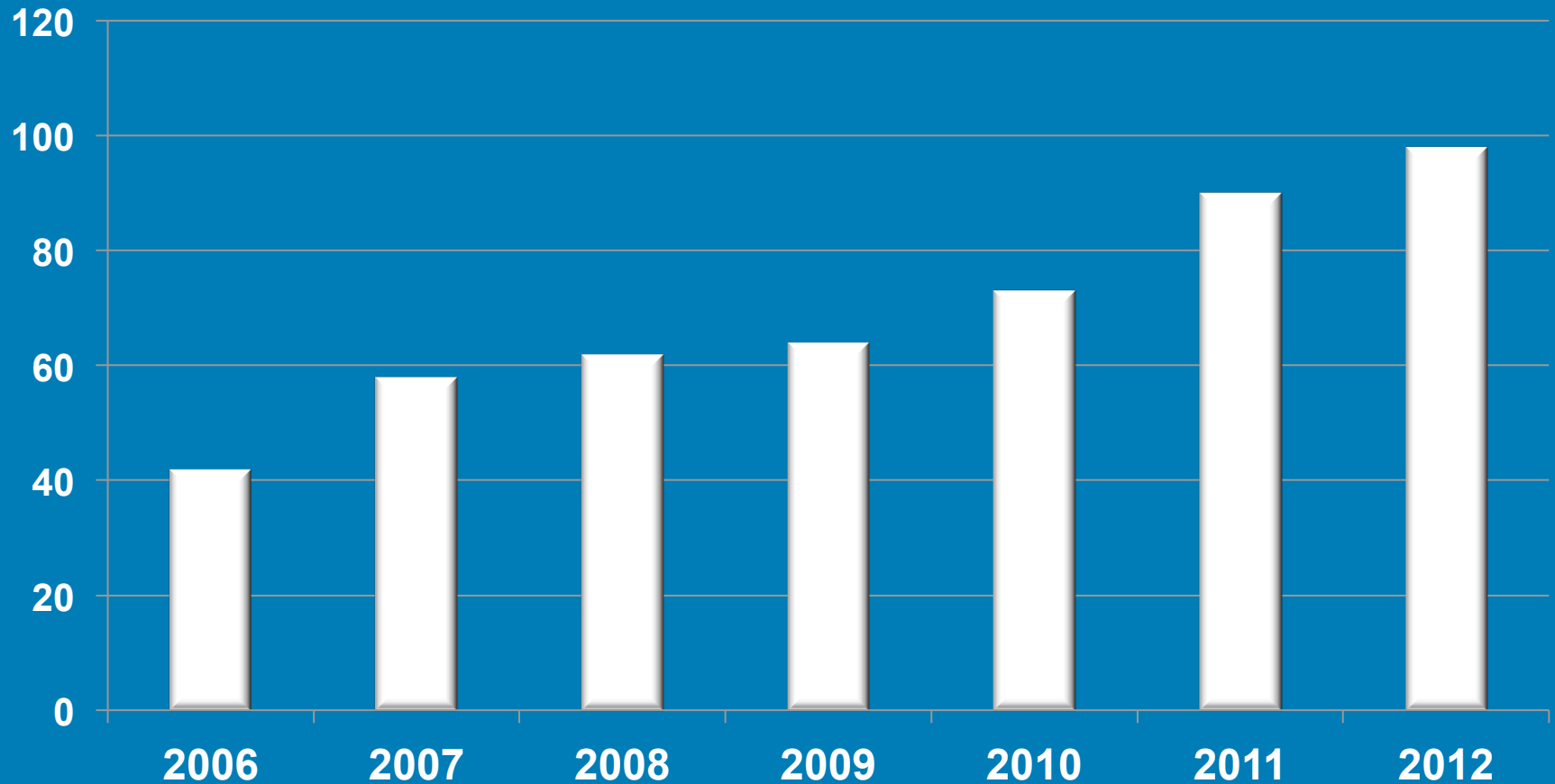
# Newer Technologies Exist



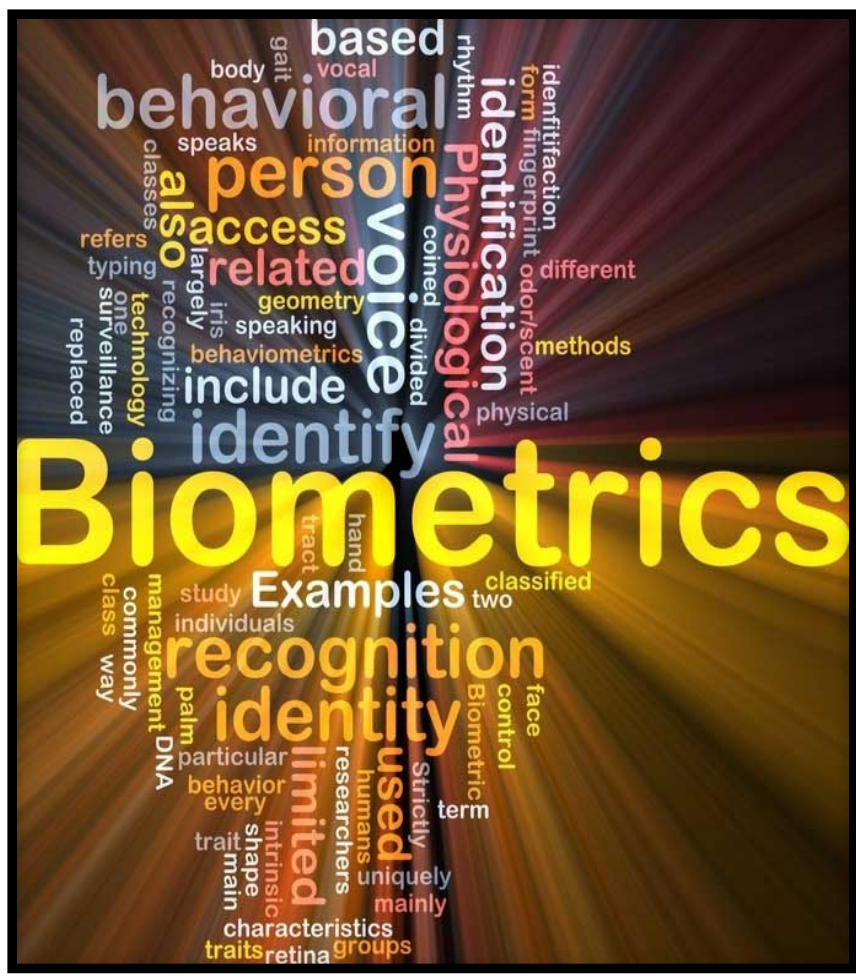


# Increasing Options

## Authentication Vendors



# Authentication Standards Combined with Advances in Biometrics Provide a New Path Forward



# How FIDO Works

1



Browser

FIDO Plugin

Device Specific Module

2

## FIDO Authenticators



4

Website

6

Validation Cache

3

5

FIDO Repository

refresh

Vendor Tokens



secret

secret



PayPal™



# The FIDO “User” Experience

- User picks their own token type
- User decides when/if to bind their token to their account
- Existing tokens (like finger) can be used by downloading the FIDO plugin
- User can download the plugin from various sites
- User could have a PIN-protected USB drive to use while travelling



# Voice Experience



Account Log In

user name

\*\*\*\*\*

Remember me in this computer.

Login Cancel

Forgot the password , [Need help?](#)

Don't have an account yet? [Register Now](#)

*fido login* ➔

**Logo**

Speak now

Please say your passphrase to log into your account

[Use a different device.](#)

Protected by *fido*

Cancel OK

# Finger Experience



Account Log In

user name

\*\*\*\*\*

Remember me in this computer.

Login Cancel

Forgot the password , [Need help?](#)

Don't have an account yet? [Register Now](#)

*fido login* ➔

**Logo**

**Swipe now**

Please swipe to log into your account.

[Use a different device.](#)

Protected by *fido*

Cancel OK

# USB Experience



Account Log In

user name

\*\*\*\*\*

Remember me in this computer.

Login Cancel

Forgot the password , [Need help?](#)

Don't have an account yet? [Register Now](#)

*fido login* ➔

**Logo**

User name

Password

[Use a different device.](#)

Protected by *fido*

Cancel OK



- The Internet needs better authentication, *now*
- Stronger authentication is not “better authentication”
- An industry standards based approach is the only viable way forward
- “Whether you believe you can do a thing, or not, you are right” (Henry Ford)



# Thank You for Your Time!

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