



“The FIDO Alliance Today”

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AGENDA

The Problem

The Solution

The Alliance

Updates

Data Breaches...

783 data breaches in 2014

>1 billion records since 2012

\$3.5 million cost/breach



“76% of 2012 network intrusions exploited weak or stolen credentials”

2013 Data Breach Investigations Report



Enter your login information:

User name:

••••••••

Password:

••••••••

OK

Cancel

The world has a **PASSWORD PROBLEM**



ONE-TIME PASSCODES

Improve security but aren't easy enough to use



SMS
Reliability



Token
Necklace



User
Confusion



Still
Phishable



WE NEED A
NEW MODEL



WE CALL OUR
NEW MODEL

Fast **ID**entity **O**nline

online authentication using
public key cryptography

AGENDA

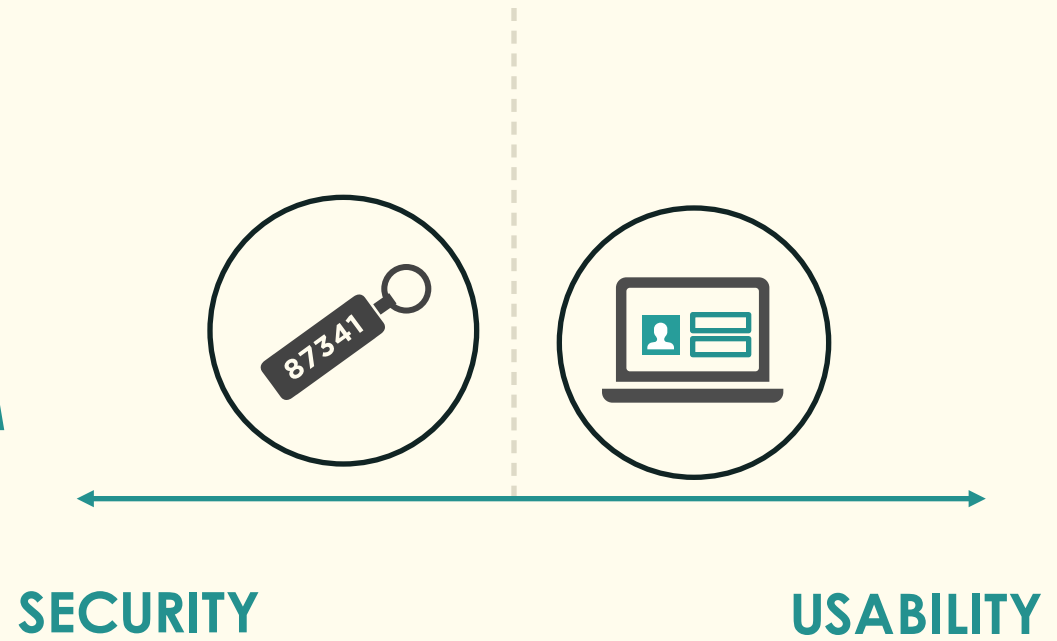
The Problem

The Solution

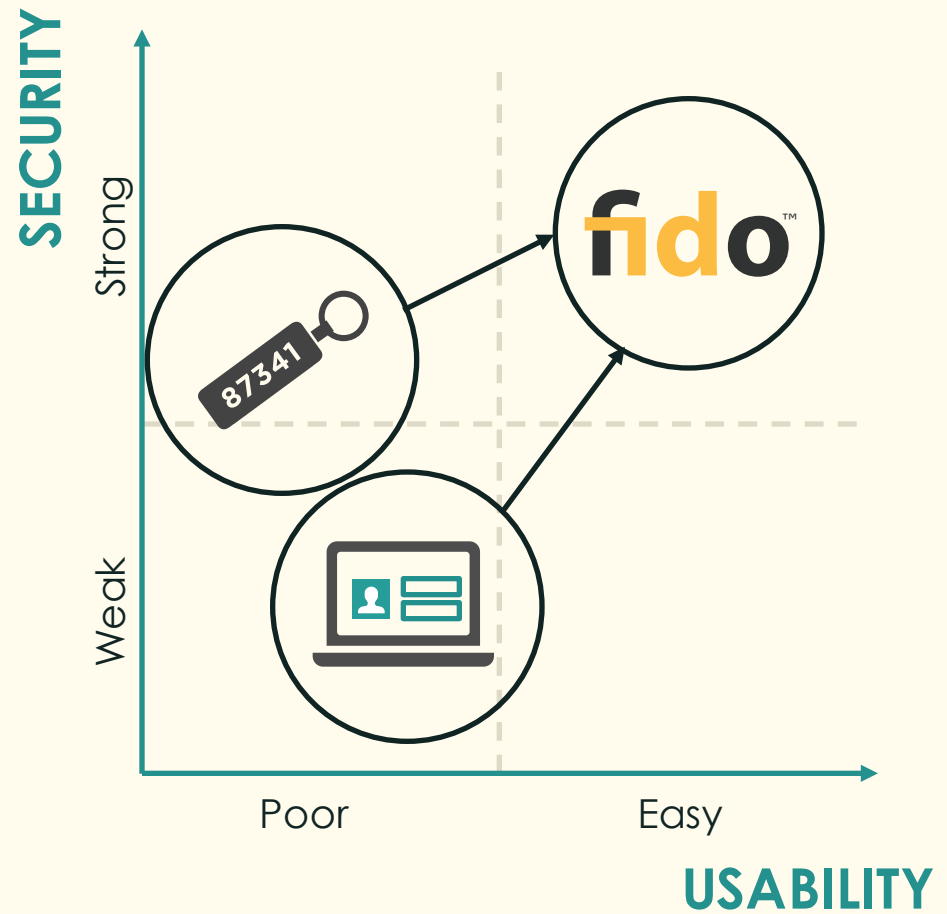
The Alliance

Updates

THE OLD PARADIGM

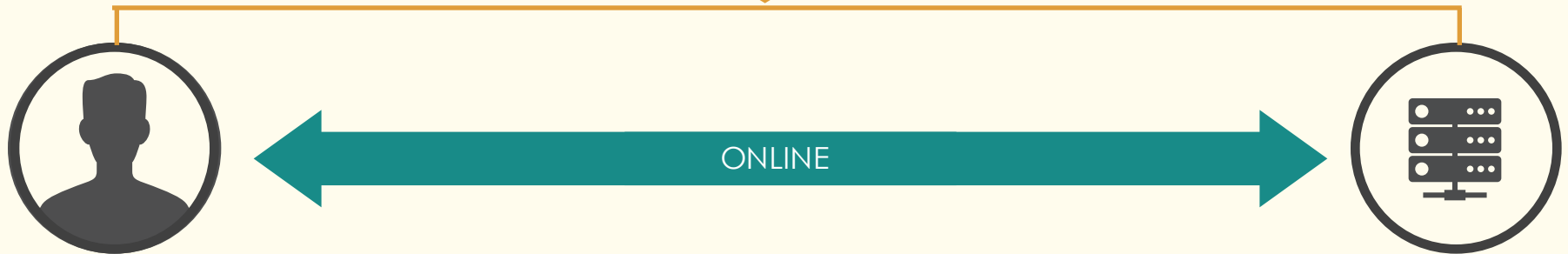


THE FIDO PARADIGM

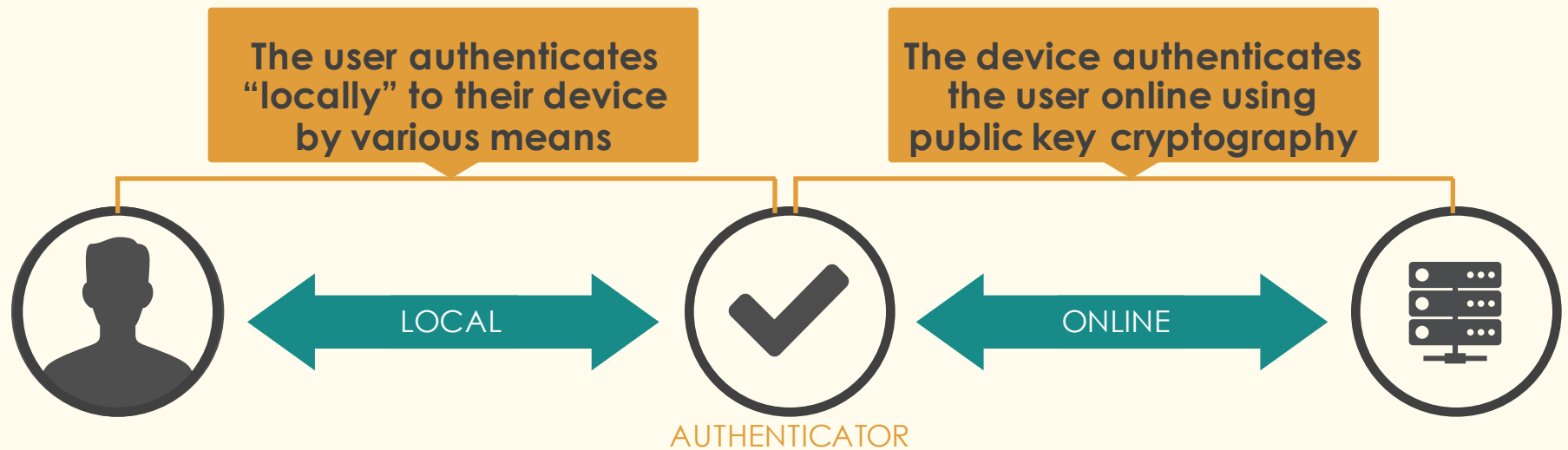


HOW OLD AUTHN WORKS

The user authenticates themselves online by presenting a human-readable secret



HOW FIDO AUTHN WORKS





online authentication using
public key cryptography

Passwordless Experience (UAF Standards)



Authentication Challenge



Biometric Verification*



Authenticated Online

Second Factor Experience (U2F Standards)



Second Factor Challenge



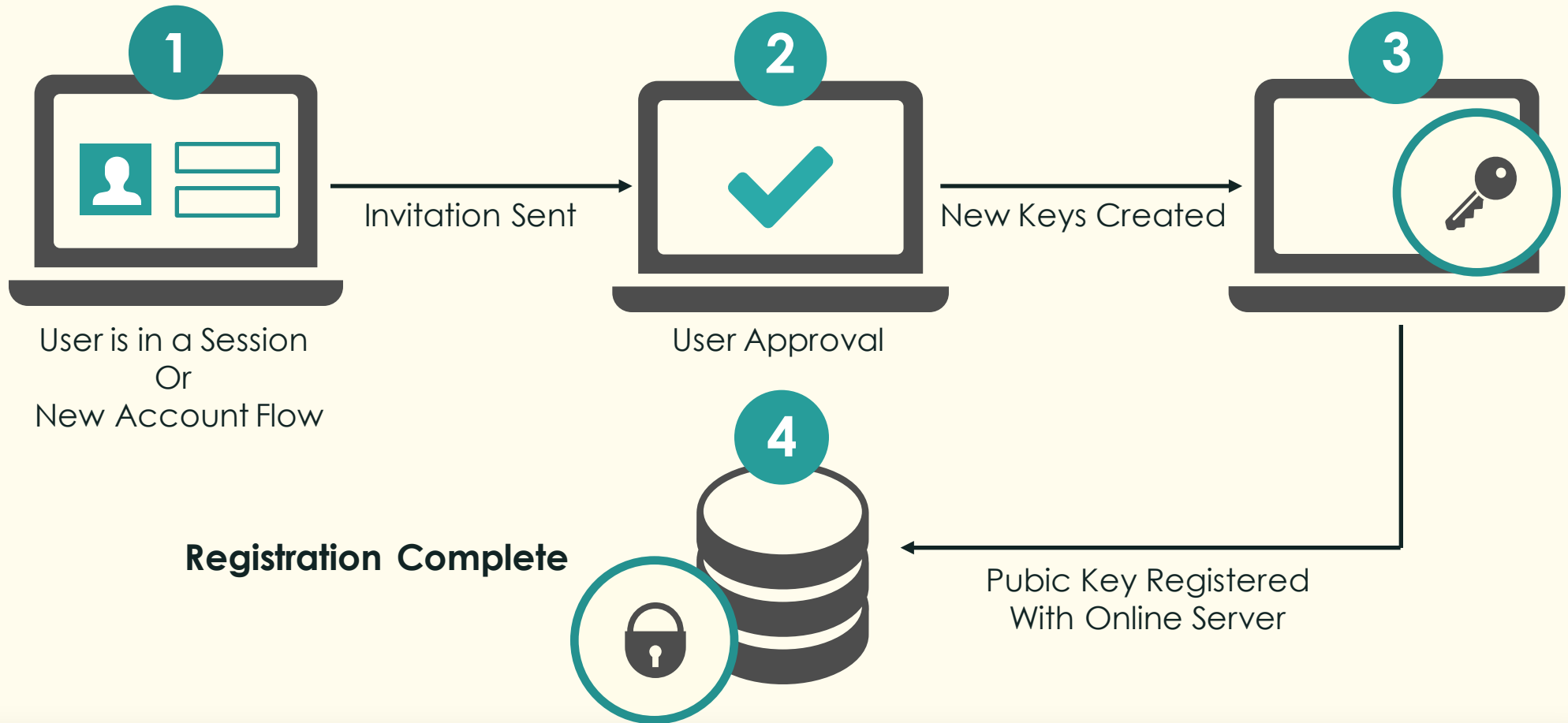
Insert Dongle* / Press Button



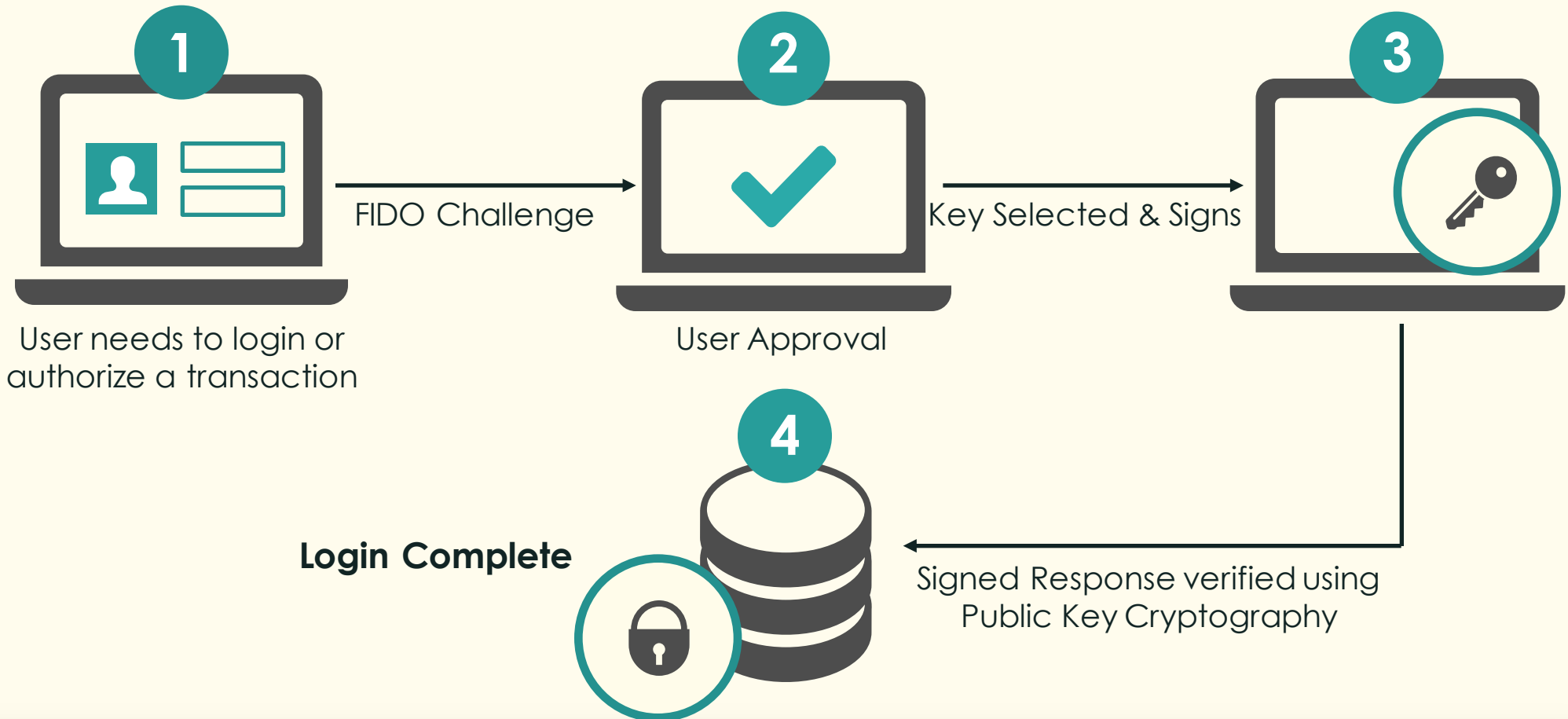
Authenticated Online

*There are other types of authenticators

FIDO Registration



FIDO Authentication





USABILITY, SECURITY
and
PRIVACY



No 3rd Party in the Protocol



No Secrets on the Server side




Biometric Data (if used) Never Leaves Device



No Link-ability Between Services



No Link-ability Between Accounts

- 
- Better Security for **online services**
 - Reduced cost for the **enterprise**
 - Simpler and Safer for **consumers**

AGENDA

The Problem

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The **F**ast **I**Dentity **O**nline (FIDO)
Alliance is an open industry
association of over 220 global
member organizations

fidoTM
alliance | simpler
stronger
authentication

- ✓ Services/Networks
- ✓ Devices/Platforms
- ✓ Vendors/Enablers



Board Members





FIDO Alliance Mission

1

Develop
Specifications

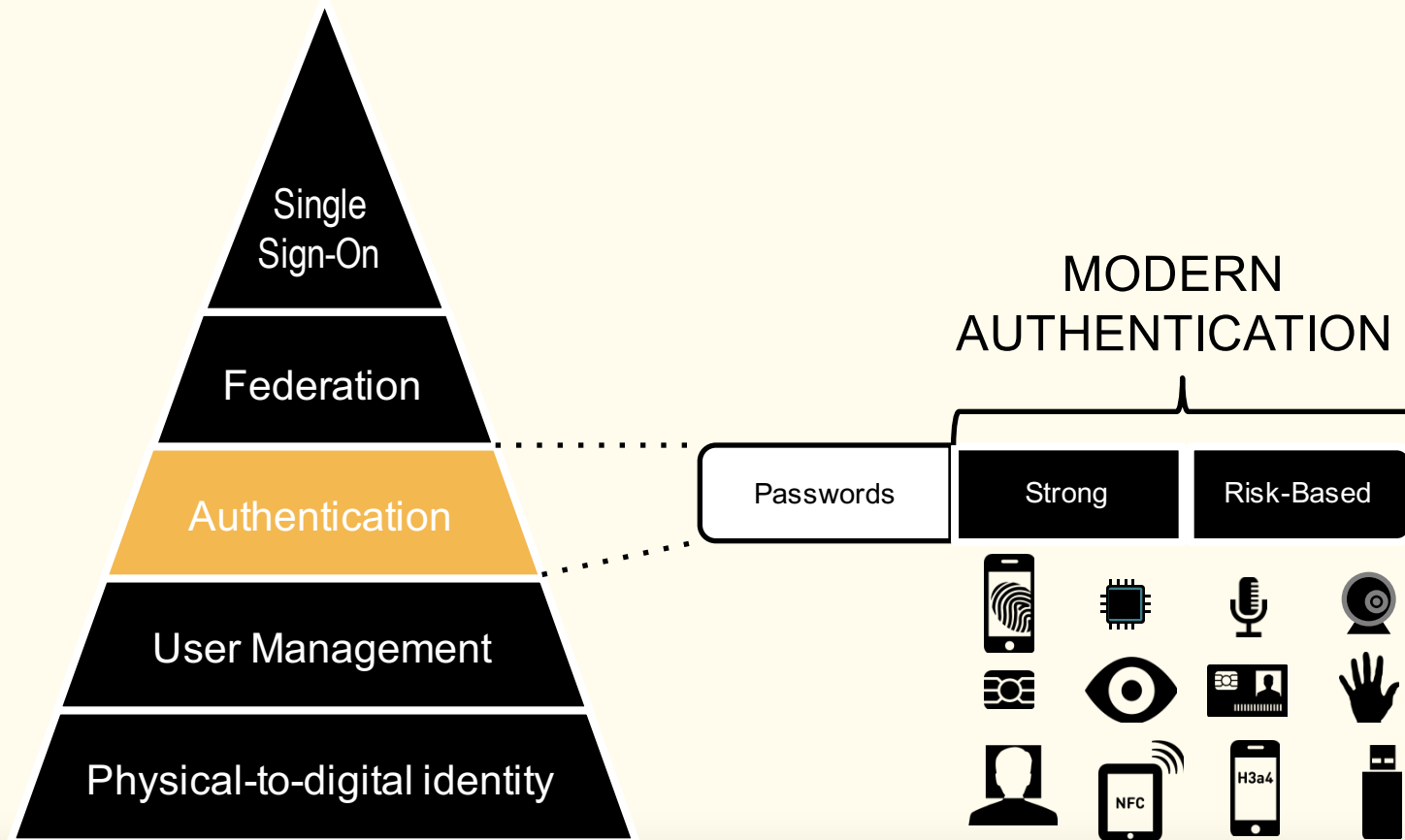
2

Operate
Adoption Programs

3

Pursue Formal
Standardization

FIDO SCOPE



AGENDA

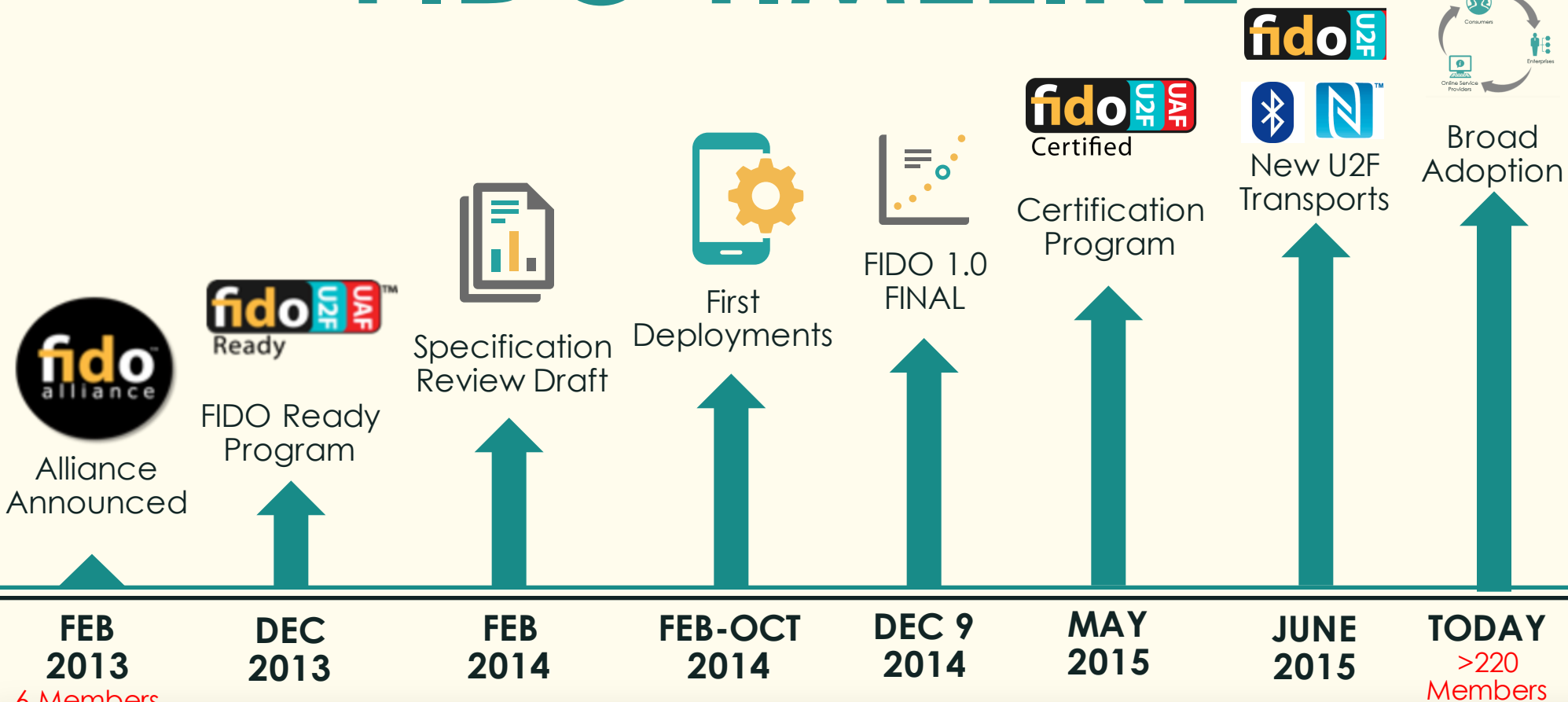
The Problem

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Updates

FIDO TIMELINE



2014 FIDO ADOPTION

*“Secure Consumer Payments Enabled for Alipay Customers with Easy-to-Use Fingerprint Sensors on Recently-Launched Samsung Galaxy S5”,
September 17, 2014*



*“Google Launches Security Key, World’s First Deployment of Fast Identity Online Universal Second Factor (FIDO U2F) Authentication”,
October 21, 2014*



*“PayPal and Samsung Enable Consumer Payments with Fingerprint Authentication on New Samsung Galaxy S5”,
Feb 24, 2014*

2015 FIDO ADOPTION

*"Today, we're adding Universal 2nd Factor (U2F) security keys as an additional method for two-step verification, giving you stronger authentication protection."
August 12, 2015*

*"Google for Work announced Enterprise admin support for FIDO® U2F "Security Key",
April 21, 2015*

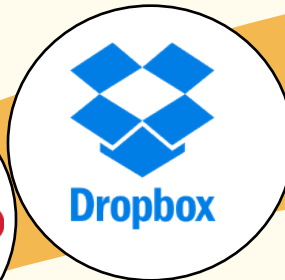
*"Qualcomm launches Snapdragon fingerprint scanning technology",
March 2, 2015*



*"Microsoft Announces FIDO Support Coming to Windows 10"
Feb 23, 2015*



*"Largest mobile network in Japan becomes first wireless carrier to enhance customer experience with natural, simple and strong ways to authenticate to DOCOMO's services using FIDO standards"
May 26, 2015*



*"the technology supporting fingerprint sign-in was built according to FIDO (Fast Identity Online) standards."
September 15, 2015*



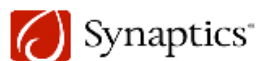
*"GitHub says it will now handle what is called the FIDO Universal 2nd Factor, or U2F, specification"
October 1, 2015*



Deployments are enabled by
FIDO Certified™ Products
available today



Certified



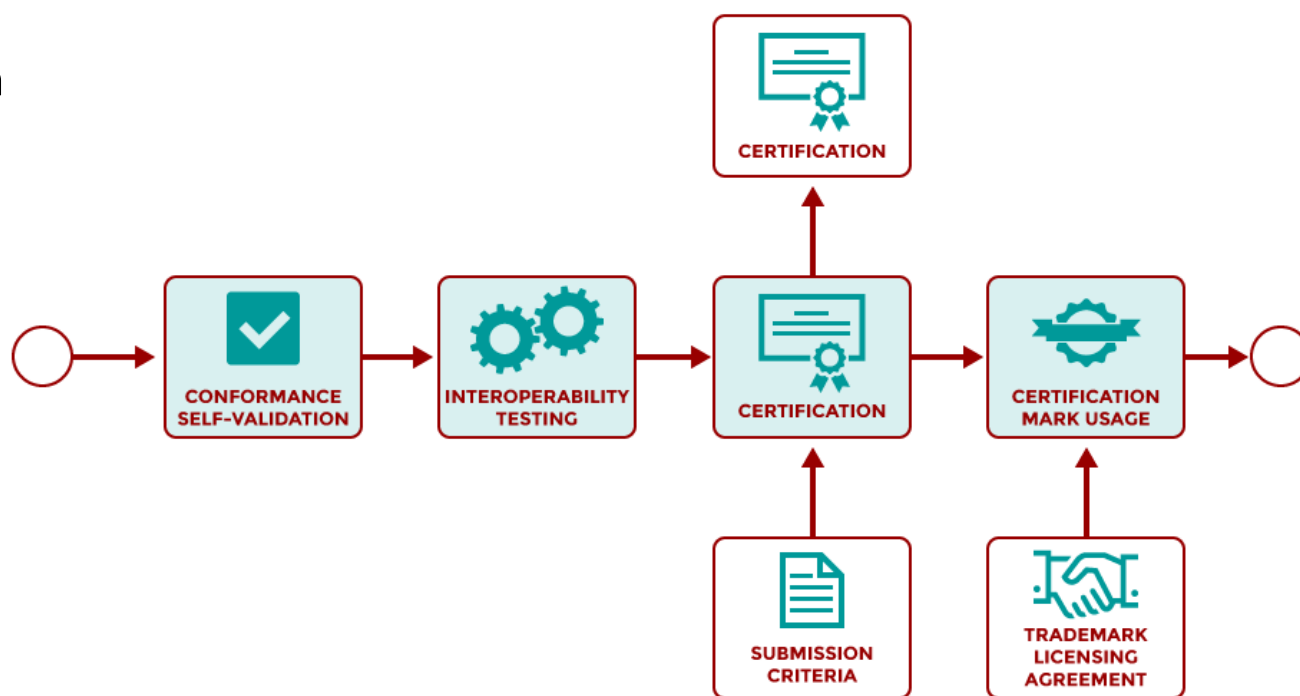


- ✓ Available to anyone
- ✓ Ensures interoperability
- ✓ Promotes the FIDO ecosystem

Steps to certification:

1. Conformance Self-Validation
2. Interoperability Testing
3. Certification Request
4. Trademark License (optional)

fidoalliance.org/certification



New in 2015

FIDO Alliance Announces Government Membership Program – US and UK Government Agencies are First to Join

Government Agencies to Participate in Development of FIDO Standards for Universal Strong Authentication

“The fact that FIDO has now welcomed government participation is a logical and exciting step toward further advancement of the Identity Ecosystem; we look forward to continued progress.”



Government Members



CAICT 中国信通院



CabinetOffice



Bundesamt
für Sicherheit in der
Informationstechnik

The FIDO Alliance logo features the word "fido" in a bold, lowercase font with "fi" in white and "do" in orange. Below it, the word "alliance" is written in a smaller, lowercase white font. To the right of the logo, a vertical line separates it from the tagline "simpler stronger authentication", which is stacked in three lines of lowercase white text.

fidoTM
alliance | simpler
stronger
authentication

The text "JOIN THE FIDO ECOSYSTEM" is centered on the slide. "JOIN THE" is in a white, uppercase, sans-serif font. "FIDO ECOSYSTEM" is in a larger, bold, cyan, uppercase, sans-serif font. The background is a dark blue space with a grid of glowing lines and a bright blue light trail.

JOIN THE
FIDO ECOSYSTEM



fidoTM
alliance

simpler
stronger
authentication

JOIN THE
FIDO ALLIANCE



EXPERIENCE SIMPLER, STRONGER AUTHENTICATION
