



The Authentication Revolution

Enter your login information:

User name:

Password:

OK Cancel



We have a **PASSWORD PROBLEM**

Data Breaches are out of control

Anthem now says 78.8M were affected by breach



MORE LIKE THIS

-  Health insurer Anthem discloses customer and employee data breach
-  State-sponsored Chinese hackers suspected in breach

U.S. states want Anthem to provide quickly to customers

on IDG Answers →
Mitt Romney thinks we need more... do you agree?

Simplify IT with the Cisco Unified

JPMorgan Chase Hacking Affects 76 Million Households

by JESSICA SILVER-GREENBERG, MATTHEW GOLDSTEIN and NICOLE PERLROTH OCTOBER 2, 2014 12:50 PM
528 Comments



Target Now Says 70 Million People Hit in Data Breach

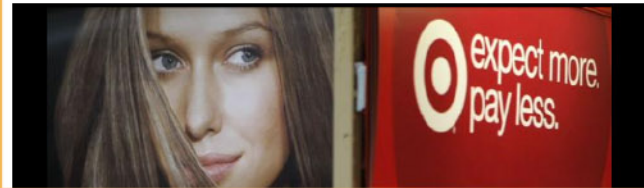
Neiman Marcus Also Says Its Customer Data Was Hacked

Email Print 72 Comments     

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By PAUL ZIOBRO And DANNY YADRON **CONNECT**

Updated Jan. 10, 2014 9:30 p.m. ET



TOO MANY TO REMEMBER,
DIFFICULT TO TYPE,
AND **TOO VULNERABLE**




Re-used



Phished



Keylogged


 Password

Remember me

[Forgot your password?](#)

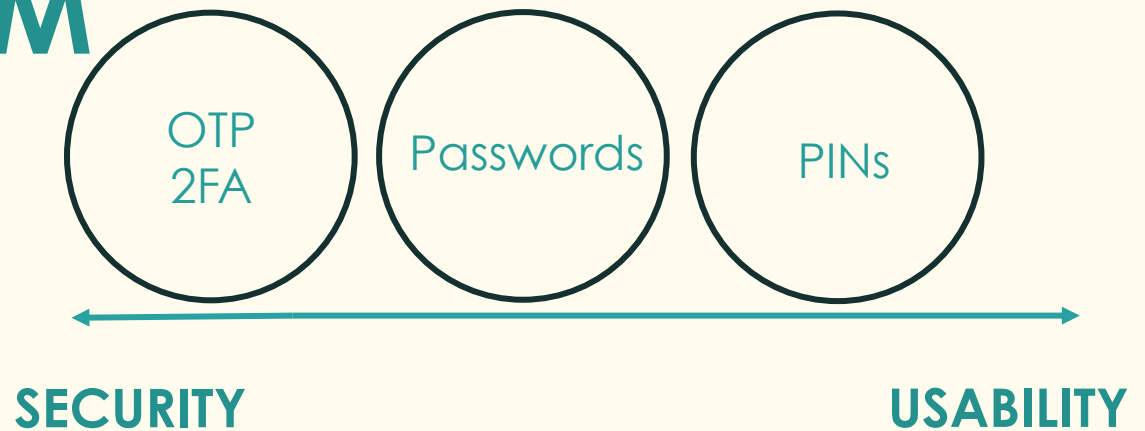
LOGIN

Adding more authentication
has largely been **rejected by users**

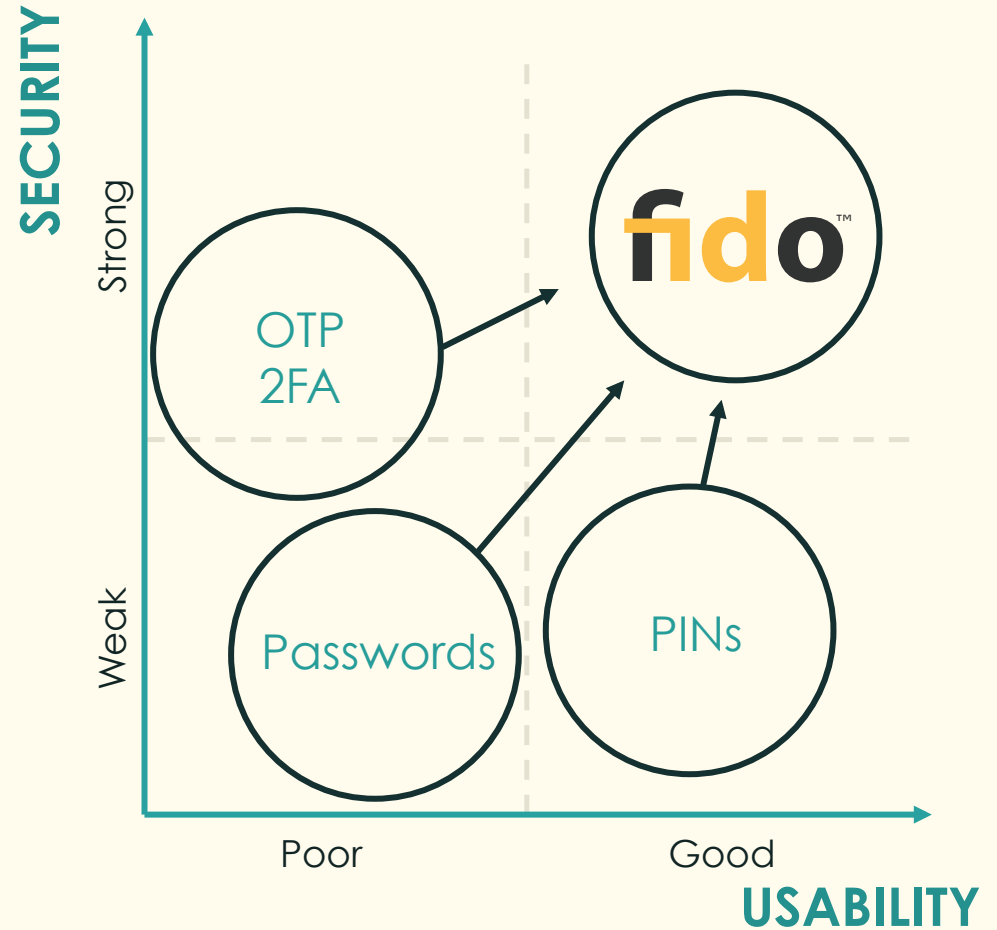


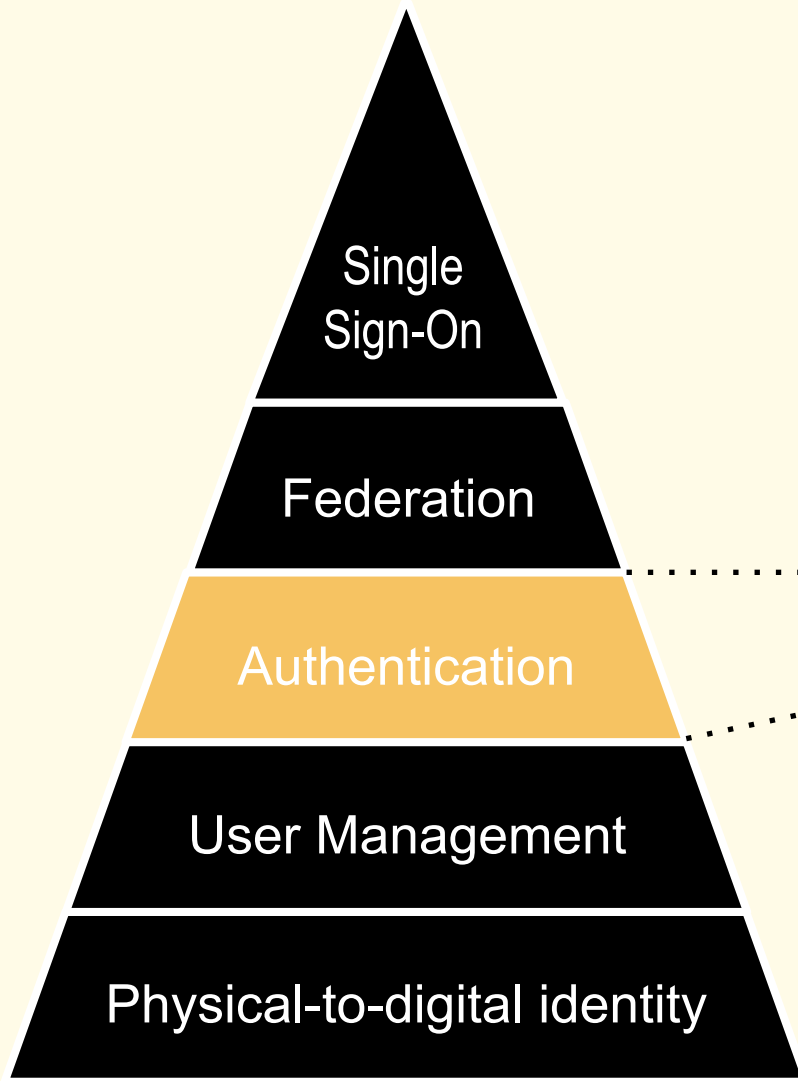
WE NEED A
NEW MODEL
Fast **ID**entity **O**nline

THE OLD PARADIGM

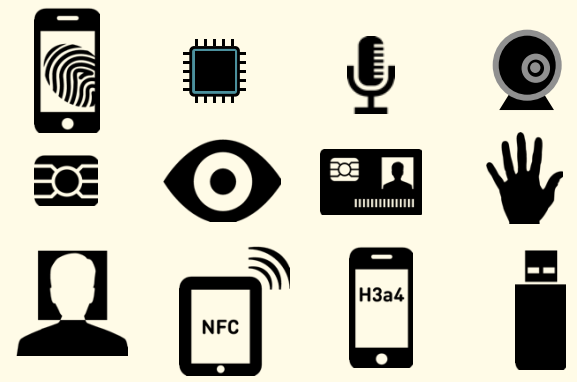


THE FIDO PARADIGM





MODERN AUTHENTICATION



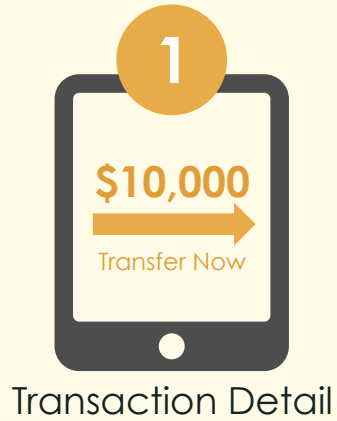
HOW DOES FIDO WORK?



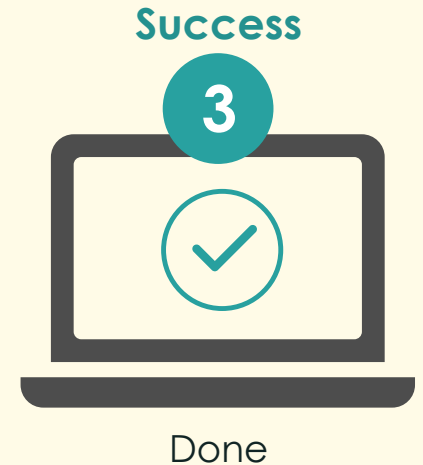
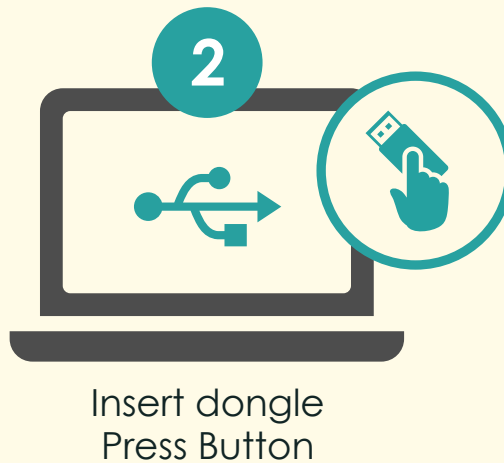


online authentication using
public key cryptography

Passwordless Experience (FIDO UAF Standards)



Second Factor Experience (FIDO U2F Standards)





USABILITY, SECURITY
and
PRIVACY



No 3rd Party in the Protocol



No Secrets on the Server side



Biometric data never leaves device



No link-ability between Services or Accounts

- 
- A man in a server room looking at a server rack. The room is dimly lit with blue and orange lights. The man is wearing glasses and a plaid shirt. He is looking at a server rack with his hand on the door. The server rack has several blue lights on it. The background is a server room with many racks of servers.
- Better Security for **online services**
 - Reduced cost for the **enterprise**
 - Simple & Safe for **consumers**

A group of four business professionals (three men and one woman) are seated around a conference table in a meeting. They are dressed in business attire (suits and blouses). The man on the right is speaking and gesturing with his hand. The woman in the center is looking towards him. The man in the middle is also looking towards the speaker. The woman on the left is looking towards the center. There are papers, glasses of water, and a smartphone on the table. The background is a blurred office setting.

The FIDO Alliance is an association of more than 180 diverse **corporate members**

- ✓ Online Services
- ✓ Chip Providers
- ✓ Device Providers
- ✓ Biometrics Vendors
- ✓ Enterprise Servers
- ✓ Platform Providers



Board Members





FIDO in 2015

The significance of early 2015 announcements

- ✓ Windows used by 1.5 billion users
- ✓ Windows 10 in 190 countries by Q3
- ✓ Free upgrade

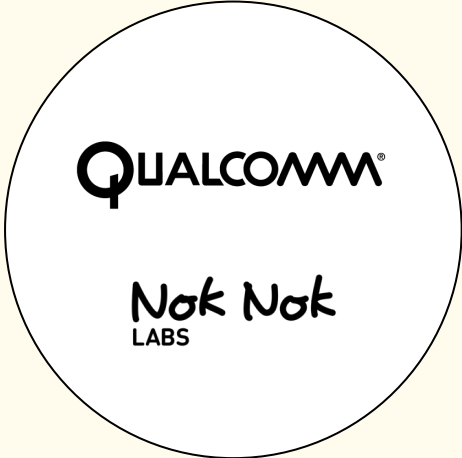


FIDO in Windows 10

A screenshot of a web browser showing an article on The Verge. The article title is "Windows Hello lets you sign into Windows 10 devices with your face or finger". The author is Tom Warren, dated March 17, 2015. The page includes a navigation menu with categories like LONGFORM, VIDEO, REVIEWS, TECH, SCIENCE, ENTERTAINMENT, DESIGN, BUSINESS, and US & WORLD. There are also "PREVIOUS STORY" and "NEXT STORY" links.

A screenshot of the Windows website. The header features the Windows logo and the text "Windows". Below the header is a navigation menu with links for HOME, BLOGS, VIDEOS, WINDOWS.COM, and NEWSROOM. A large blue banner contains the text "Windows For Your Business". Below the banner, the main content area displays the headline "Microsoft Announces FIDO Support Coming to Windows 10" and the byline "February 13, 2015 by Dustin Ingalls // PC // 6 Comments".

- ✓ Market leader to ship FIDO client
- ✓ 85+ OEMs as of Q4
- ✓ >1 billion Android devices shipped
- ✓ Innovative sensor



A screenshot of a ZDNet article. The ZDNet logo is in the top left. Navigation links include 'White Papers', 'Hot Topics', 'Downloads', 'Reviews', and 'Newsletters'. A secondary navigation bar lists 'US Edition', 'Security', 'Data Center', 'Research', 'Windows', 'IoT and Big Data', and 'Storage'. The article title is 'Qualcomm launches Snapdragon fingerprint scanning technology'. A 'MUST READ' link points to 'The computers that will help scientists step closer to...'. The article is categorized under 'Emerging Tech'. A summary states: 'Based on government-grade technology, Qualcomm's Snapdragon Sense ID is said to go far beyond current biometric scanners.' The author is Charlie Osborne for 'Between the Lines', dated March 2, 2015. There are social media follow buttons for @ZDNetCharlie (6,185 followers) and a newsletter sign-up button.

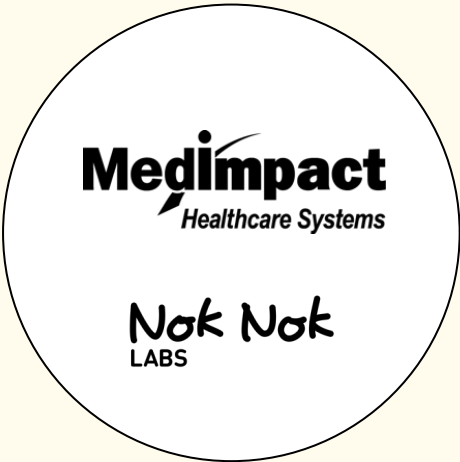
Qualcomm Snapdragon

Produced	From 2008 to 2015
Designed by	Qualcomm
Instruction set	ARM
Microarchitecture	Cortex-A8 / Cortex-A15
Cores	1/2/4
Application	Mobile SoC

A screenshot of a Forbes article. The navigation bar includes 'Most Popular', 'Lists', 'Video', 'Subscribe to Forbes', and a search box. The article title is 'Qualcomm Is The No.1 Player In The The Global Baseband & Application Processor Market'. The text states: 'Qualcomm is currently the leader in the global cellular baseband chip market as well as the smartphone applications processor market, with a 64% and 51% share in the two segments, respectively. According to research firm Strategy Alalytics, LTE basebands'.

FIDO in Snapdragon

- ✓ First healthcare deployment
- ✓ Physician access to health records up to 50 million Healthcare users



FIDO in Healthcare

CNN Money Business Markets Tech Personal Finance Small Business Luxury stock tickers

FIDO Alliance Members MedImpact and Nok Nok Labs to Deliver FIDO Authentication to Physicians, an Industry First for Healthcare

March 23, 2015: 10:00 AM ET

The FIDO (Fast Identity Online) Alliance (<https://www.fidoalliance.org/>), an industry consortium launched in 2013 to revolutionize online security with open standards for simpler, more secure authentication systems and Nok Nok Labs, a leading provider of FIDO authentication solutions for users who need secure authentication solutions for their devices.

MedImpact MedImpact Direct Client Member Portal

Home PBM Solutions Market Solutions Company **Newsroom**

Newsroom
Press Releases
 Events
 Publications
 Experts
 Industry Resources
 Multimedia

Press Releases

View new and archived corporate press releases.

← **MedImpact First in Healthcare to Deploy FIDO Authentication, with Nok Nok Labs Enabling Physician Access Portal**

National PBM to Provide FIDO Authentication for up to 50 Million Healthcare Consumers

San Diego—March 23, 2015

- ✓ **Google for Work** announced Enterprise admin support for FIDO® U2F “Security Key” – April 21
- ✓ Google for Work is used by over 5 million businesses worldwide
- ✓ “The Security Keys are a great step forward, as they are very practical and more secure.” – Woolsworth IT



FIDO in Enterprise

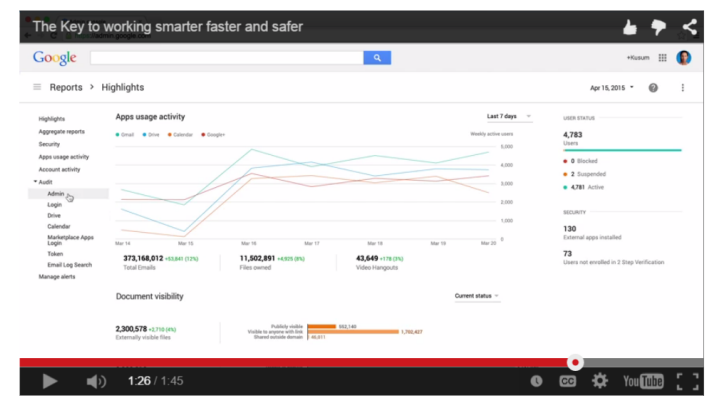
The Key for working smarter, faster and more securely

Posted: Tuesday, April 21, 2015 g+1 83 Tweet 21 Like 13 Share 72

Posted by Eran Feigenbaum, Director of Security, Google for Work

It's easier than ever to share ideas across the world. But as technology keeps advancing to connect us, so do the techniques of those with bad intentions. The [number of records breached in 2014](#) was staggering; [weak usernames and passwords](#) remain the leading cause. The introduction of [2-Step Verification](#) added a layer of security for your Google Account, but we knew more could be done.

That's why Google, working with the [FIDO Alliance](#) standards organization, developed the [Security Key](#) — an actual physical key used to access your Google Account. It sends an encrypted signature rather than a code, and ensures that your login cannot be phished. And using this key saves you time — when you need to verify your Google Account on a Chrome browser, the key's light will flash. Just tap it and the signature sends automatically. In fact, when we rolled the Security Key out to Googlers last year, they loved that it was so much faster than when they had to enter a code.



New Google Apps controls to manage Security Keys

Businesses like Yelp and Woolworths started piloting the Security Key at work and have been looking for ways to

The screenshot shows an Amazon search results page for "FIDO U2F Security Key". The search bar contains "FIDO U2F Security Key" and the results show 1-16 of 18 results. The top result is a blue Yubico FIDO U2F Security Key, priced at \$17.99 (Prime) and in stock. Below it is a Plug-up International Security Key, priced at \$5.99 (new) with 2 offers. The page includes filters for 'Show results for' (Electronics, Computers & Accessories), 'Refine by' (Amazon Prime, Brand), and 'See All 4 Departments'.

- ✓ Governments worldwide are looking at FIDO
- ✓ FIDO featured at White House Summit
- ✓ No collaboration framework...



FIDO & Government

NEWS & MORE PRESS RELEASES EVENTS STAY INFORMED MEDIA KIT

Governments Prioritize Strong Authentication in Cybersecurity and Consumer Protection

by Ramesh Kesanupalli, FIDO Alliance Vice President

A photograph of Barack Obama speaking at a podium during a White House summit. The background features a blue banner with the text "THE WHITE HOUSE SUMMIT ON CYBERSECURITY AND CONSUMER PROTECTION" and the FIDO Alliance logo.

2013 Data Breach Investigations Report (conducted by Verizon in concert with the U.S. Department of Homeland Security) noted that 76% of 2012 network intrusions exploited weak or stolen credentials.

-- NIST Roadmap for Improving Critical Infrastructure Cybersecurity, 12-Feb-2014

New Government Membership Class

- Reflecting an increased focus on Government collaboration worldwide
- Details are now published in the new FIDO Alliance Membership Agreement

A woman with curly hair is sitting on a light-colored sofa, looking intently at a laptop screen. She is wearing a light-colored, short-sleeved top. The background is softly blurred, suggesting an indoor setting with natural light. The overall mood is calm and focused.

A range of
FIDO PRODUCTS
is now available

Online Services



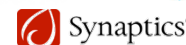
Chip Providers



Device Providers



Biometrics Technology Providers



Implementing 1.0 Specifications (this is only a subset of active implementations)

Enterprise Servers



Open Source



Mobile Apps/Clients



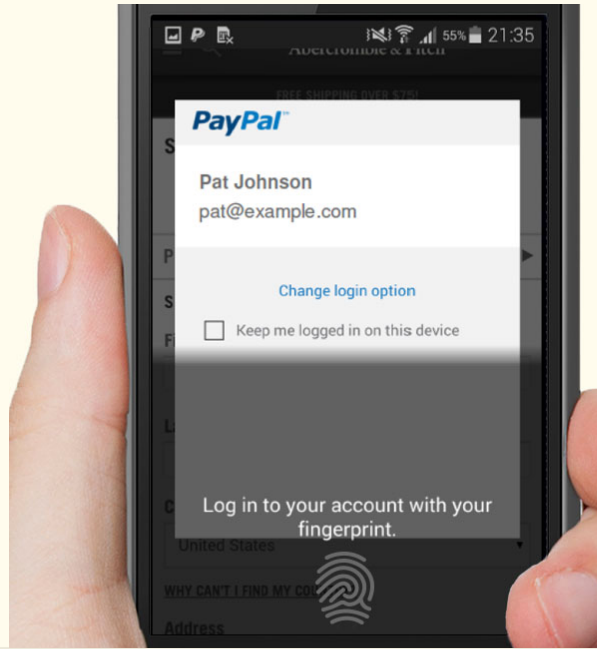
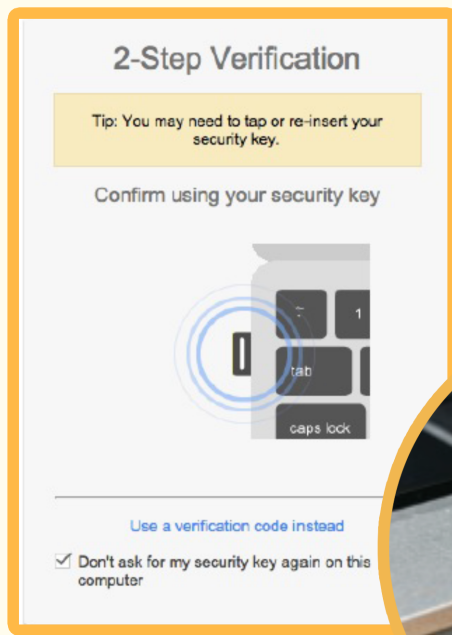
WWW Browsers



- ✓ **PayPal** continues FIDO enablement in improved mobile wallet app.
- ✓ **Google** has FIDO in Chrome and 2-Step Verification.
- ✓ **Samsung** adds touch to Galaxy® S6 and pre-loads its own FIDO client



2014 Deployments





JOIN THE
**Authentication
Revolution**



EXPERIENCE SIMPLER, STRONGER AUTHENTICATION
