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**EXPERIENCE SIMPLER, STRONGER AUTHENTICATION**

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**Philip Andreae**  
**Oberthur Technologies**

# 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 A breach

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

on IDG Answers  
Mitt Romney thinks we need more h 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

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Updated Jan. 10, 2014 8:30 p.m. ET



How  
save  
A lo  
Som  
Not



*76% of 2012 network intrusions exploited weak or stolen credentials.*

We have a **PASSWORD PROBLEM**



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



# FIDO Alliance Mission

1

Develop  
Specifications

2

Operate  
Adoption Programs

3

Pursue Formal  
Standardization



A photograph of four business professionals (three men and one woman) sitting around a conference table in a modern office setting. They are engaged in a discussion, with one man in the foreground writing on a document. The image has a semi-transparent blue overlay with a dot pattern.

The FIDO Alliance is an open  
association of nearly 200 diverse  
**member organizations**



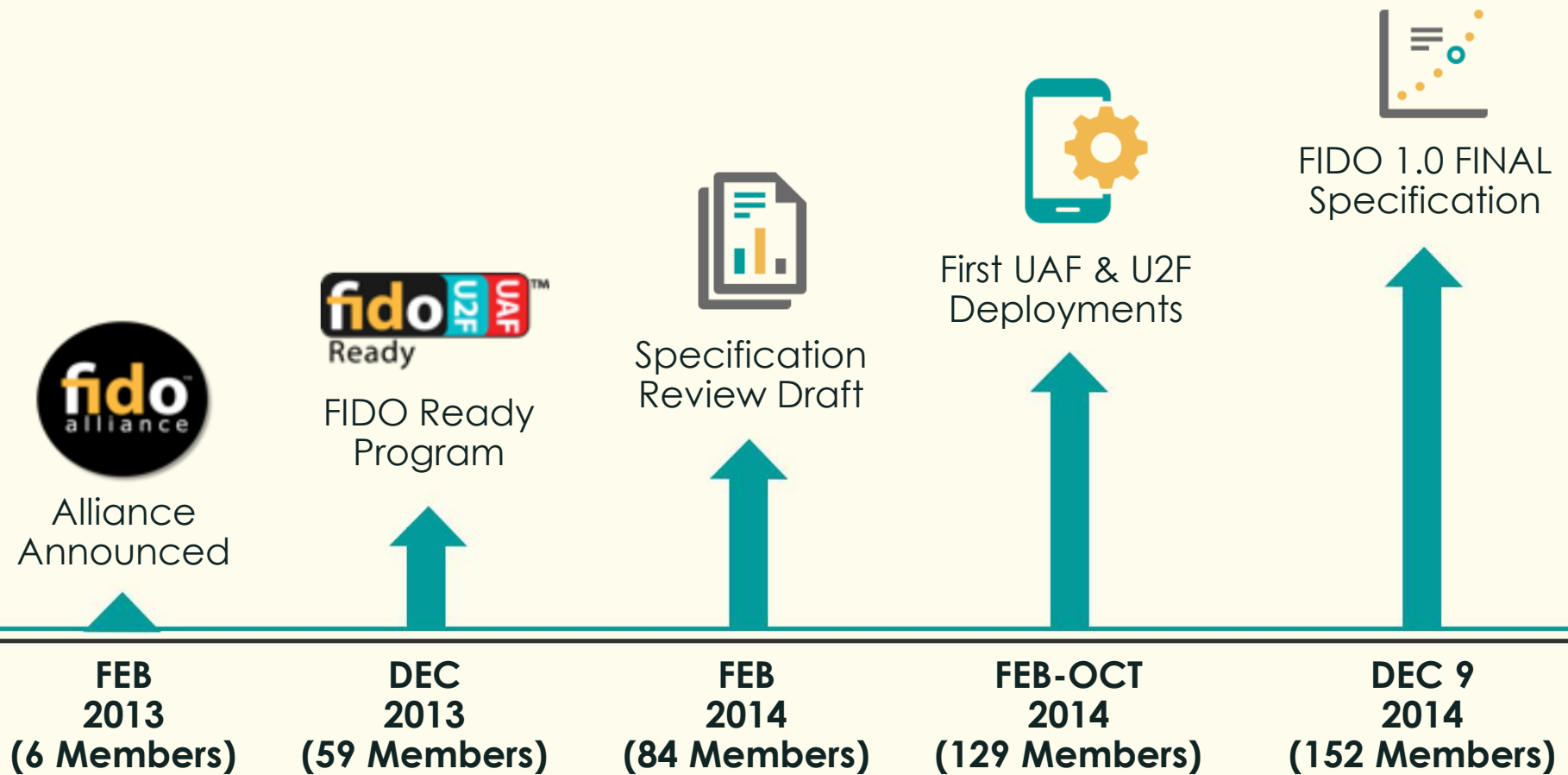
- ✓ Services/Networks
- ✓ Devices/Platforms
- ✓ Vendors/Enablers



Board Members



# FIDO TIMELINE

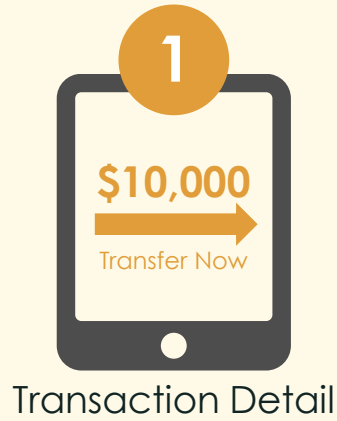


The background is a blurred image of a laptop screen. At the top, a menu bar with 'Project', 'Window', and 'Help' is visible. Below it, a file explorer shows 'index.html' and 'controllers.backend'. The main area of the screen displays code with syntax highlighting, including HTML tags like `<div class=`, `<a href=`, and `<span.glyphic=`.

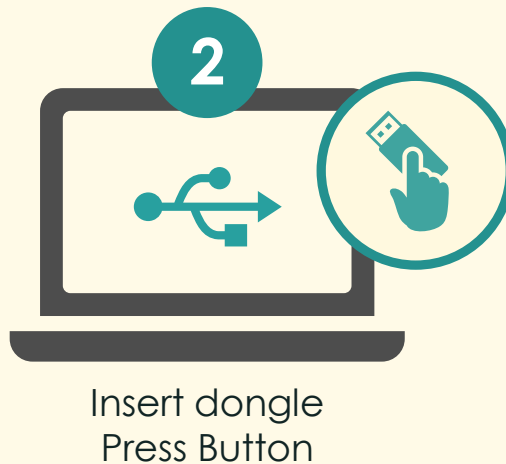
# online authentication using **public key cryptography**



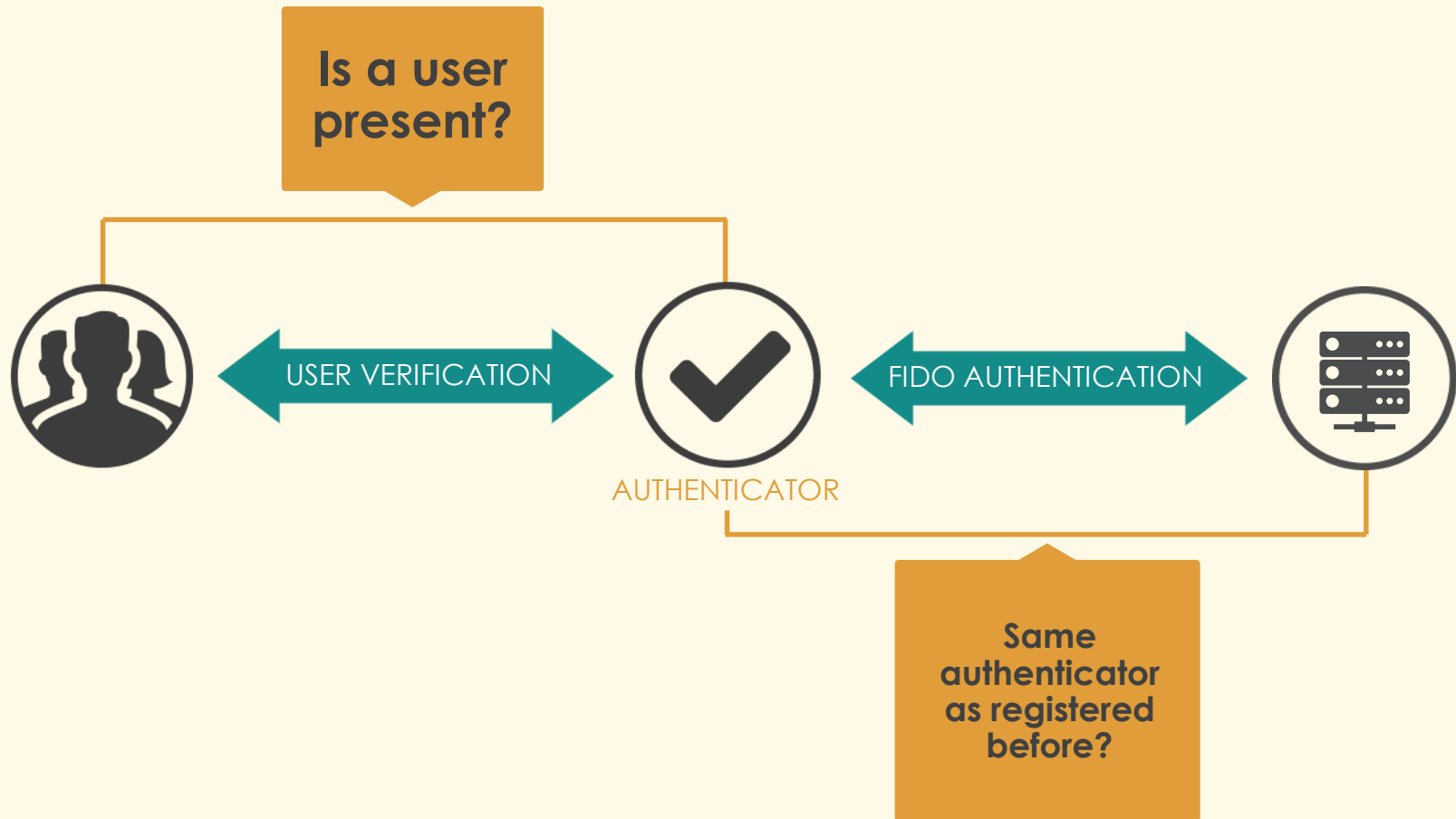
## Passwordless Experience (FIDO UAF Standards)



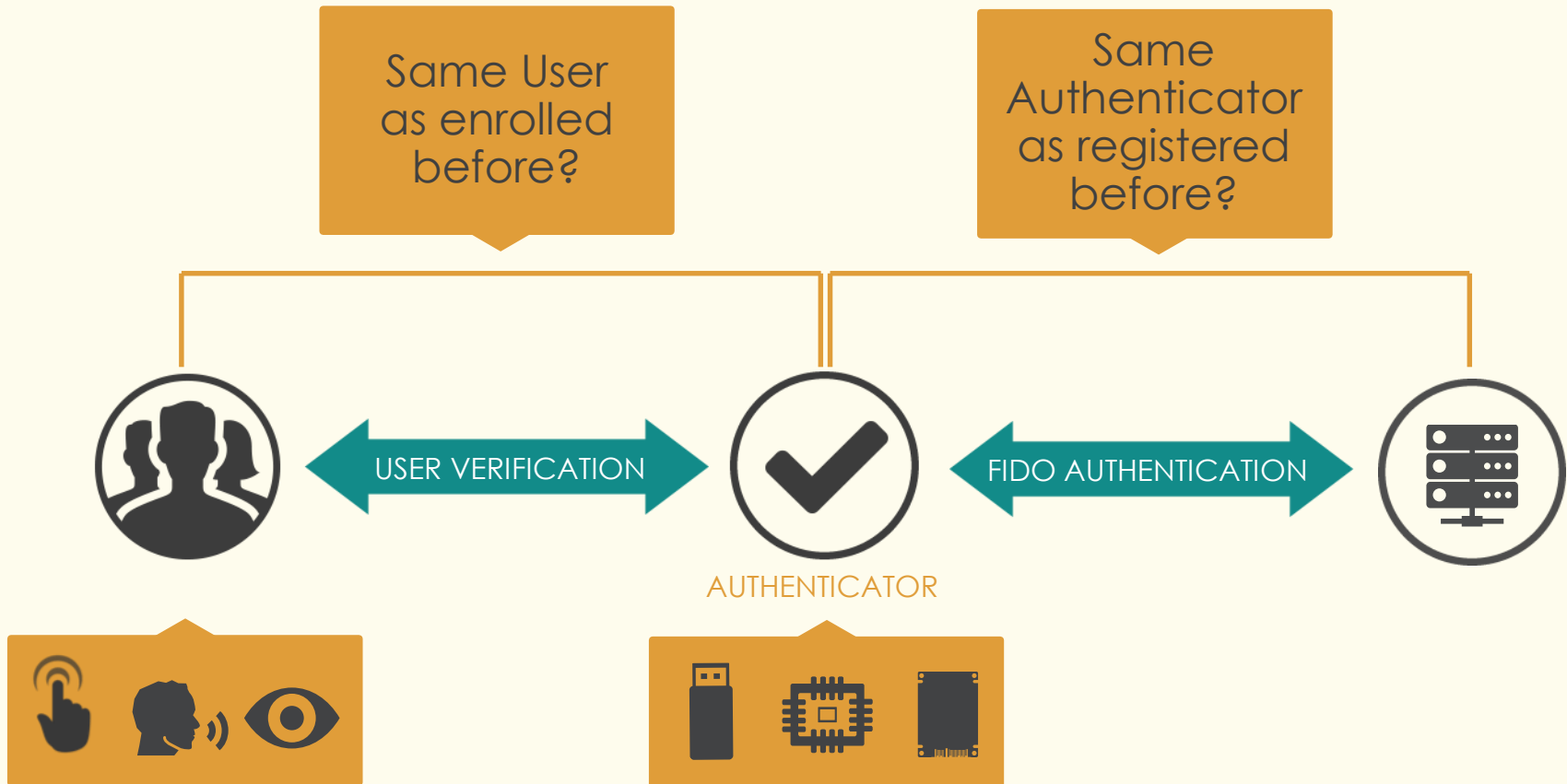
## Second Factor Experience (FIDO U2F Standards)



# FIDO UNIVERSAL 2<sup>ND</sup> FACTOR



# FIDO UNIVERSAL AUTHENTICATION FRAMEWORK UAF







# 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 or Accounts

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

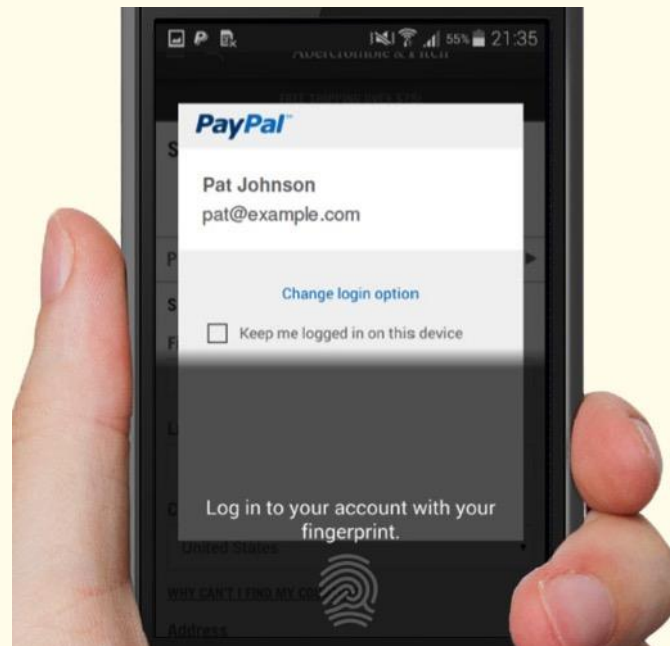
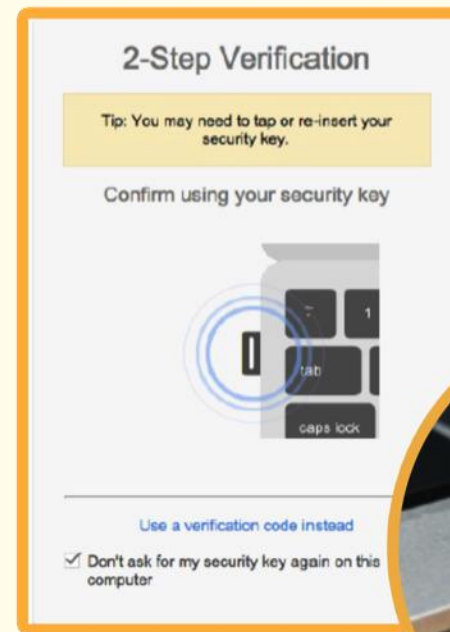


WWW Browsers





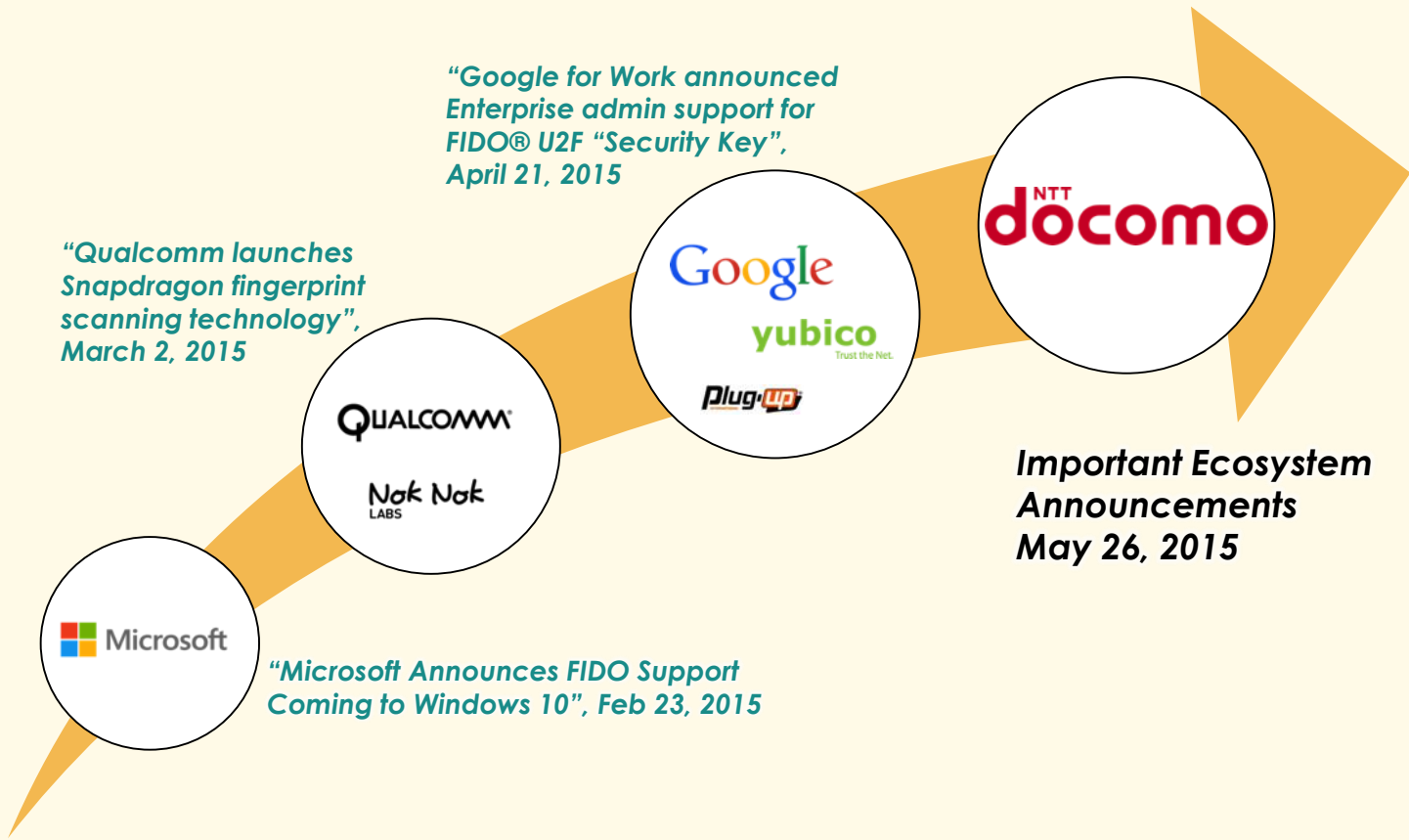
- ✓ **PayPal** deploys FIDO-enabled mobile wallet app on Samsung devices.
- ✓ **Google** has FIDO in Chrome and 2-Step Verification in Gmail.
- ✓ **Samsung** adds FIDO enabled fingerprint authentication to Galaxy®



2014 Deployments

# 2015 news from the Market

## LEADERS FROM AROUND THE WORLD



# New Government Membership Class

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



- 
- A man in a plaid shirt and glasses is standing in a server room, looking at a server rack. The room is dimly lit with blue and orange lights. The server racks are filled with equipment, and the man is looking at one of them. The background is a blurred view of the server room.
- Better Security for **online services**
  - Reduced cost for the **enterprise**
  - Simple & Safe for **consumers**





JOIN THE  
**FIDO ALLIANCE**



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