# Web Authentication User Journeys

Simple Secure Authentication Steven Soneff - sso@google.com

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#### WebAuthn enables user journeys that are

Simple – intuitive and easy for user

**Secure** – resistant to phishing, re-use, etc.

#### Authentication has two core user journeys

01

#### **Bootstrap**

User authenticates to a service for the first time

02

#### **Re-Authentication**

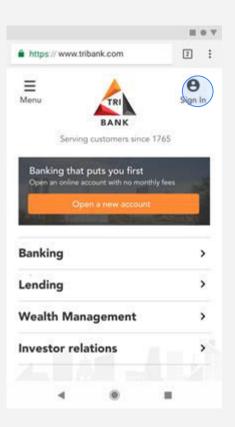
User does a repeat authentication to a service

...The next slides will walk through these user journeys as a user might encounter them on the web

1. Registering built-in authenticator for reAuth (mobile web)



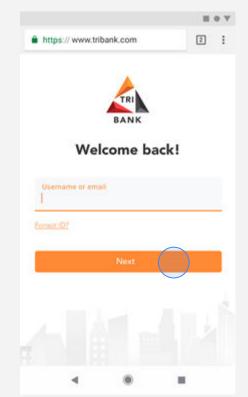
Elisa opens launches her mobile browser, Chrome, and goes to Tri-Bank

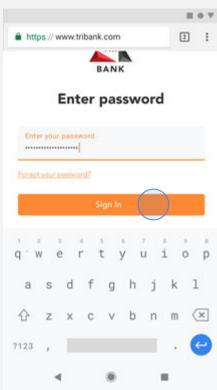


1. Registering built-in authenticator for reAuth (mobile web)



She signs in with her username and password (+potentially other factors)



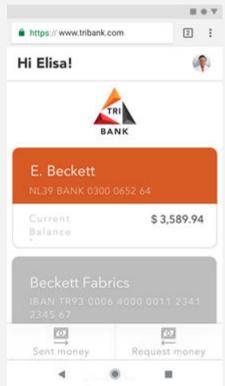


1. Registering built-in authenticator for reAuth (mobile web)



Tri-Bank shows a promo asking Elisa if she wants to opt-in to use Fingerprint to sign-in.



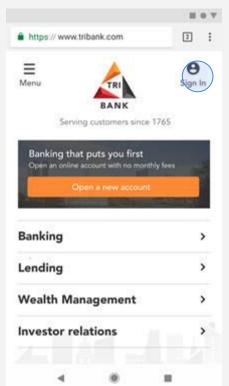


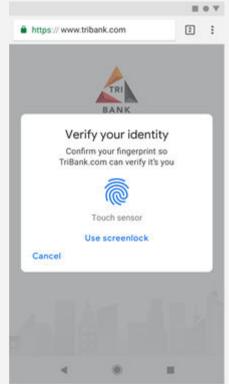
Elisa comes back to Tri-Bank in another session

### 2a. Using built-in authenticator for reAuth (mobile web)



The next time Elisa opens Tri-Bank on mobile browser, she gets a fingerprint dialog

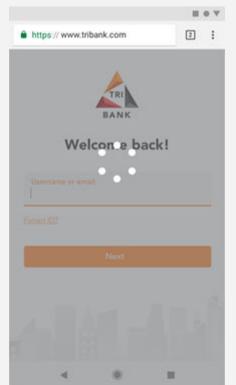


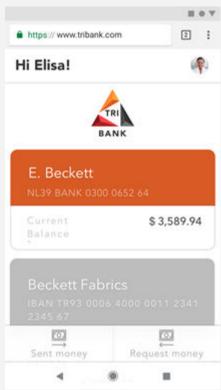


2a. Using built-in authenticator for reAuth (mobile web)



Using only her fingerprint, she's able to sign-in without using her username + password on mobile web



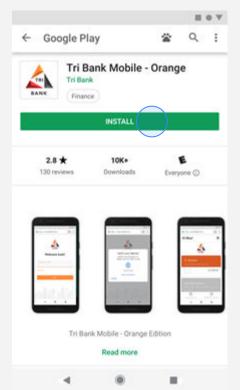


# Elisa downloads Tri bank from the Play Store, she launches the app for the first time to sign in to check her funds

2b. Using built-in authenticator for reAuth (native mobile app)



#### She installs Tri Bank from Google Play Store and opens the app

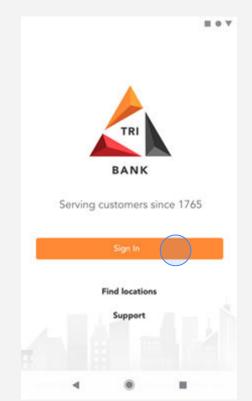


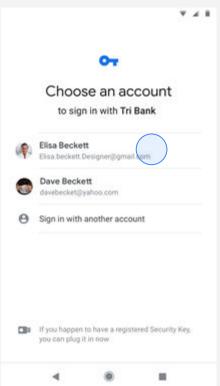


## 2b. Using built-in authenticator for reAuth (native mobile app)



Elisa chooses sign in and also chooses an account.

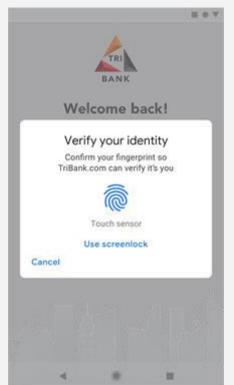


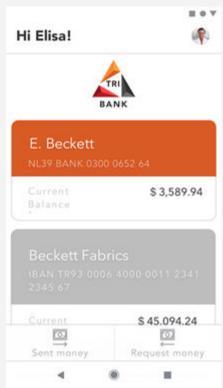


## 2b. Using built-in authenticator for reAuth (native mobile app)



Elisa now is asked to authenticate with the fingerprint dialog



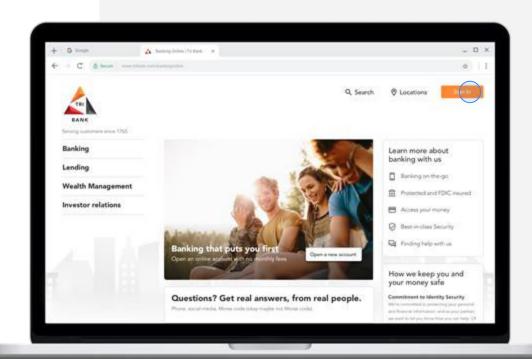


# Elisa wants to sign in to her bank on her desktop computer

#### 3i. Cross-Platform bootstrap



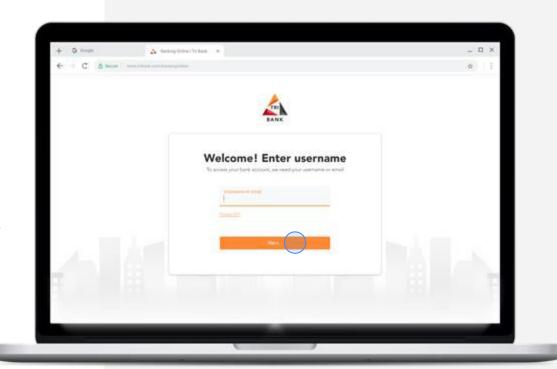
Elisa chooses to sign-in on her desktop browser



#### 3i. Cross-Platform bootstrap



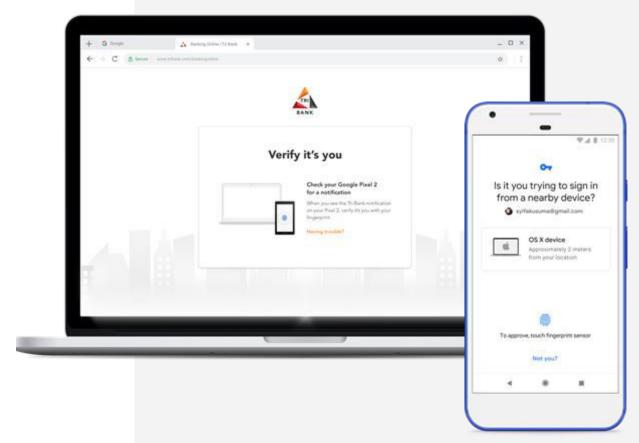
Elisa enters her account username and chooses to proceed 'next'



#### 3i. Cross-Platform bootstrap



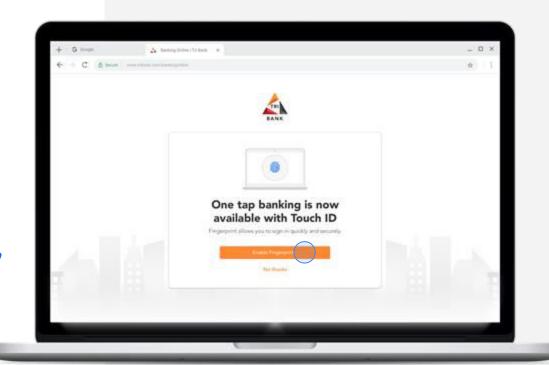
She's asked to verify the new device using her phone fingerprint that she's been using to sign-in to Tri-Bank



#### 3ii. Cross-Platform bootstrap



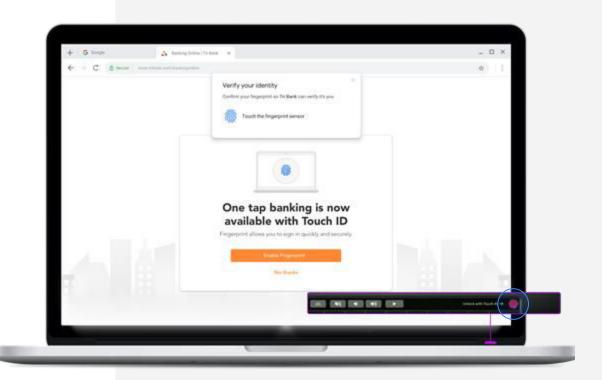
Because Elisa has a
Macbook with Touch ID,
Tri-bank can asks her if
she wants to use local
fingerprint on the
device.



#### 3ii. Cross-Platform bootstrap



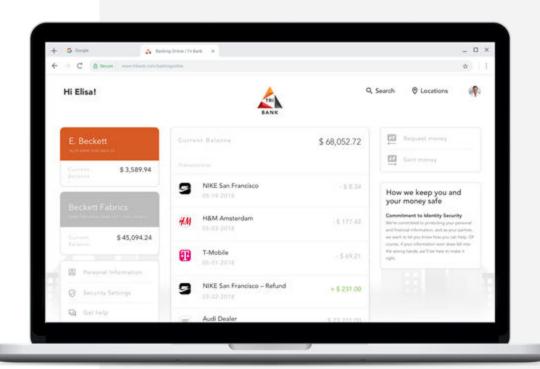
Elisa gets prompted to try using the local fingerprint on the device.



#### 3ii. Cross-Platform bootstrap



She opts-in and continues to her account

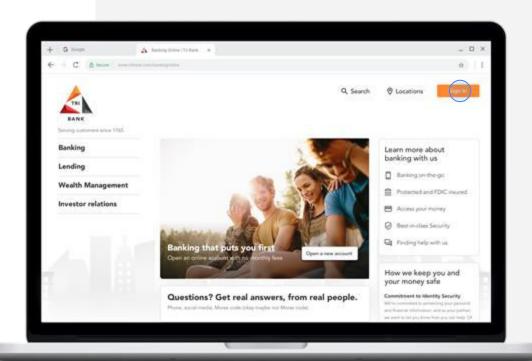


...when Elisa comes back to Tri-Bank on the Macbook Pro

#### 4. Using built-in authenticator for reAuth



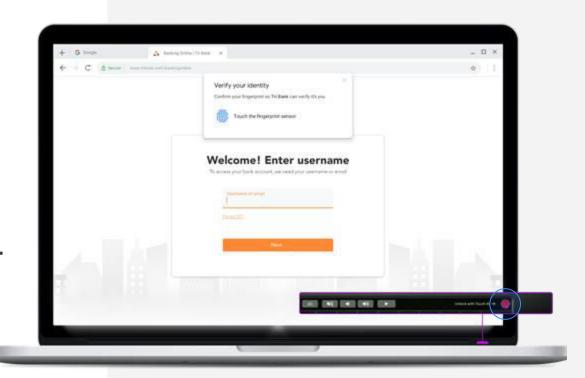
Elisa comes back to sign-in on her desktop browser



#### 4. Using built-in authenticator for reAuth



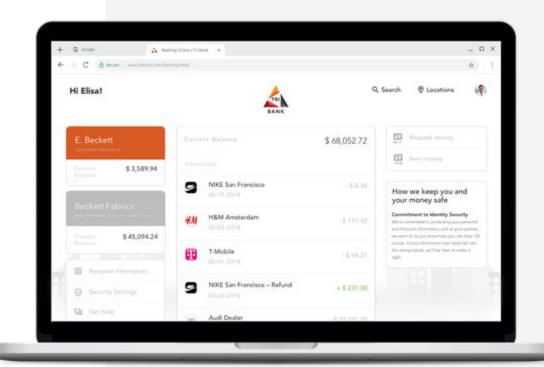
A fingerprint dialog appears above the signin page and Elisa touches the sensor



#### 4. Using built-in authenticator for reAuth



Elisa's identity is accepted and she's signed in!



# Note that we're inheriting the strength of the credentials from

the initial bootstrap.

# **Summary**

Simple - avoid typing, avoid passwords, minimal decisions

Secure - passwordless, multi-factor, phishing-resistant

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