

From: Trystan Kosmyntka [REDACTED]
To: Ricardo Cortes [REDACTED]
CC: Trystan Kosmyntka [REDACTED]
BCC:
Subject: Columbus Deck
Attachments: Columbus - 07242015.key;
Sent: 09/30/2015 09:31:05 PM 0000 (GMT)

Here's the deck in the event my laptop fails me...

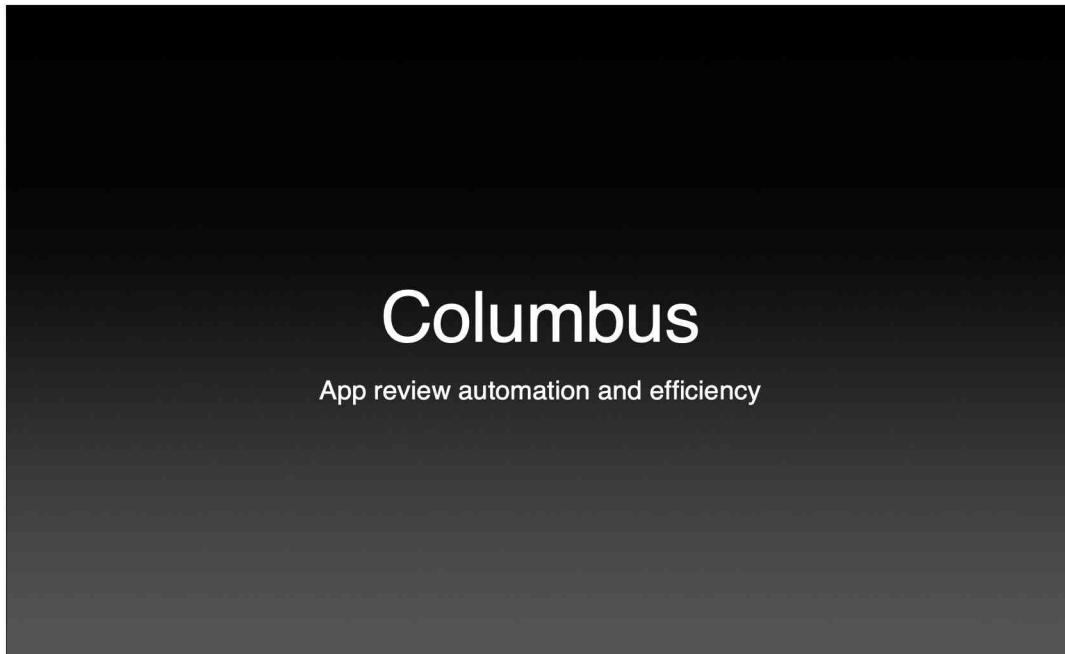
PLAINTIFF
U.S. District Court - NDCAL
4:20-cv-05640-YGR-TSH
Epic Games, Inc. v. Apple Inc.
Ex. No. PX-0335
Date Entered _____
By _____

Exhibit
PX 335

PX-0335.1

APL-APPSTORE_09310119





“Anything Apple can do structurally to scale this better and reduce review times would be perhaps the single most impactful change to our ability to ship great apps”

- Mike Beltzner, Pinterest

added name

The Problem

Volume (61,277 submissions - 7 days)

Complexity (155 countries, 24 categories, 910 snippets)

Manual & Slow

- Here's the problem, the volume is immense and continues to grow. The complexity is insane... 155 countries and 910 different types rejections reasons today. They are looked at manually everytime starting from scratch and by different people (inconsistent). And all of this results in an SLA longer than developers should expect and even worse creates a great deal of anxiety and ill will between Apple and developers.

Goals

Reduce # of manual reviews

Reduce developer perceived review time

Improve consistency

Improve quality

Slimmed it down

Matt's Note: Ton of scam apps in store, it's called out in the reviews. To good to be true.

And we can continue to audit catalog for scam apps

Start in highest impact areas

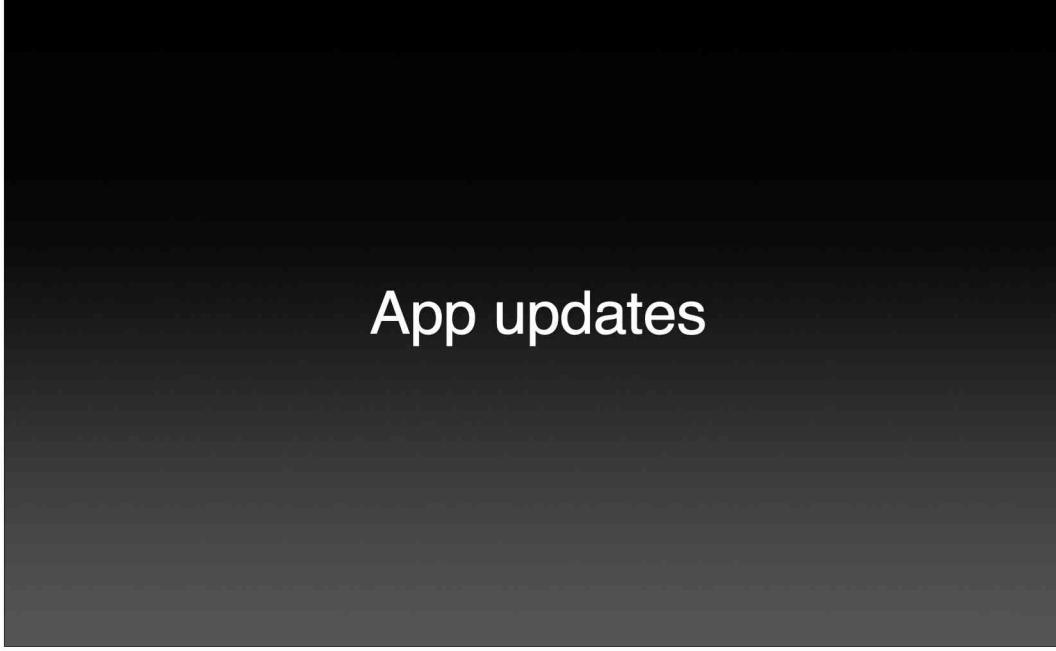
There are a couple specific areas that are prime for automation...

Top 10 rejection reasons

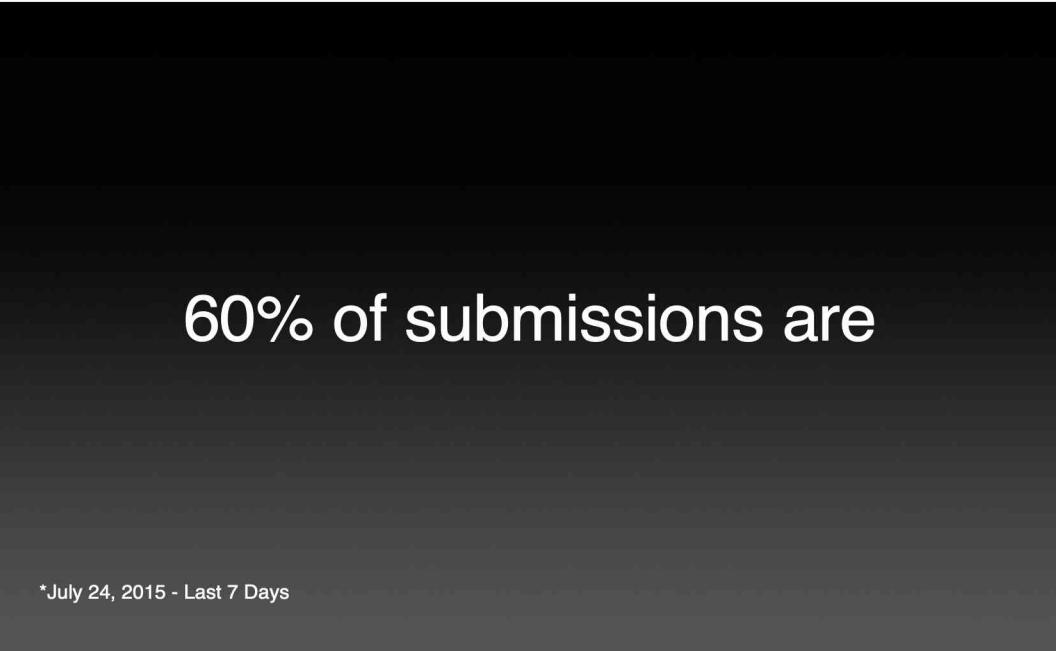
14%	Information Needed
10%	2.2 Apps that exhibit bugs will be rejected
5%	10.6 Apple and our customers place a high value on simple, refined, creative, well thought through interfaces. They take more work but are worth it. Apple sets a high
3%	3.8 Developers are responsible for assigning appropriate ratings to their Apps. Inappropriate ratings may be changed/deleted by Apple
3%	3.1 Apps or metadata that mentions the name of any other mobile platform will be rejected
3%	2.1 Apps that crash will be rejected
3%	3.3 Apps with names, descriptions, screenshots, or previews not relevant to the content or functionality of the App will be rejections
3%	22.2 Apps that contain false, fraudulent or misleading representations or use names or icons similar to other Apps will be rejected
2%	3.4 App names in iTunes Connect and as displayed on a device should be similar, so as to not cause confusion
2%	17.2 Apps that require users to share personal information, such as email address and date of birth, in order to function will be rejections
52%	Other Reasons (< 2% each)

*June 17, 2015 - 7 Day Report

Changed title

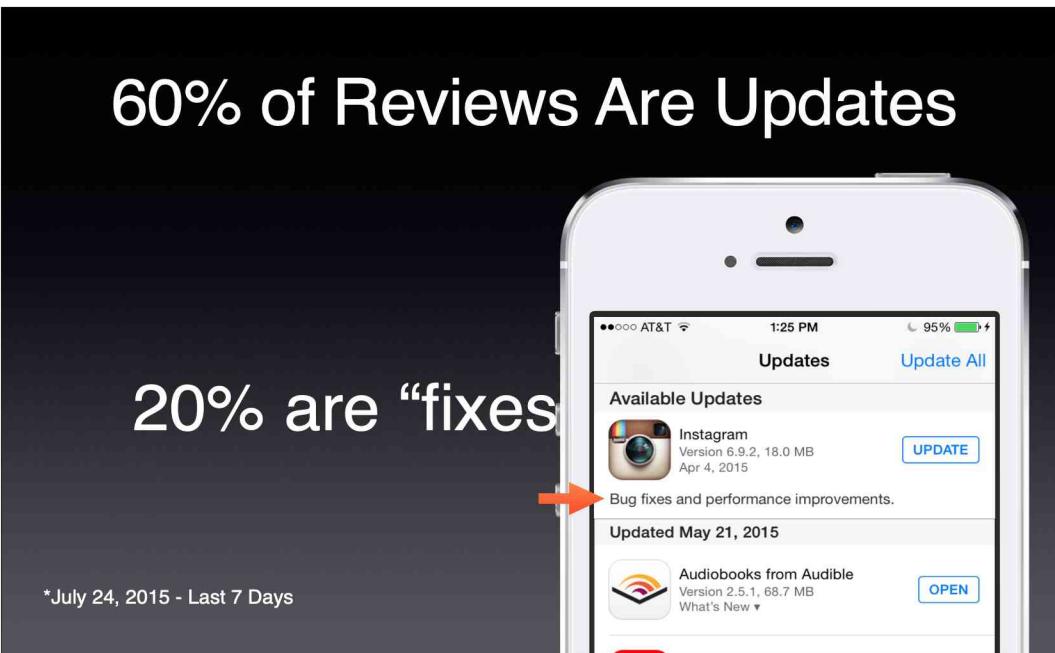


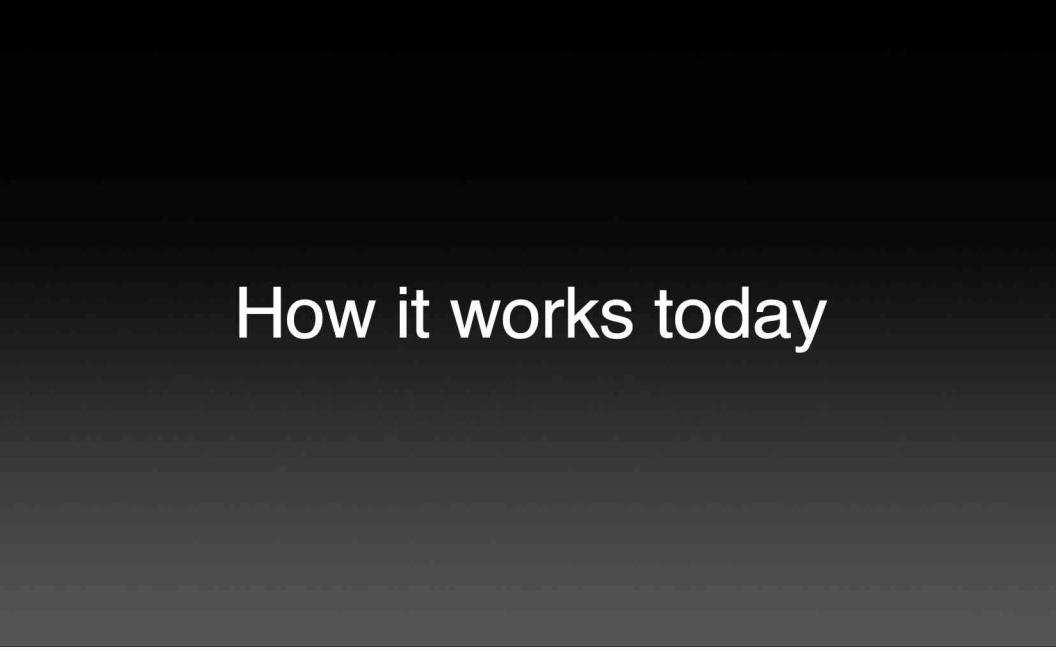
App updates



60% of submissions are

*July 24, 2015 - Last 7 Days



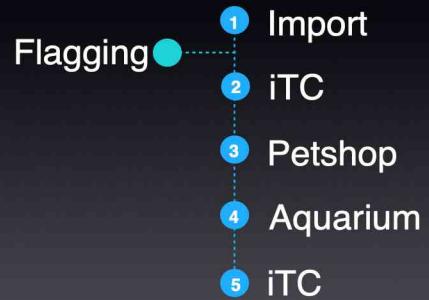


How it works today

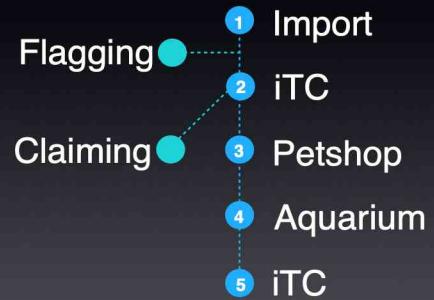
Existing Flow

- 1 Import
- 2 iTC
- 3 Petshop
- 4 Aquarium
- 5 iTC

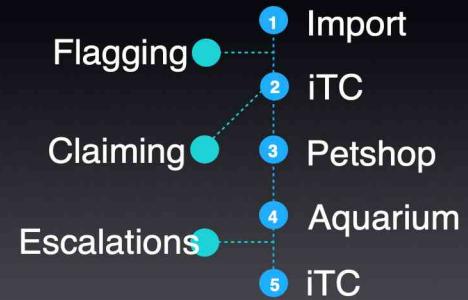
Existing Flow

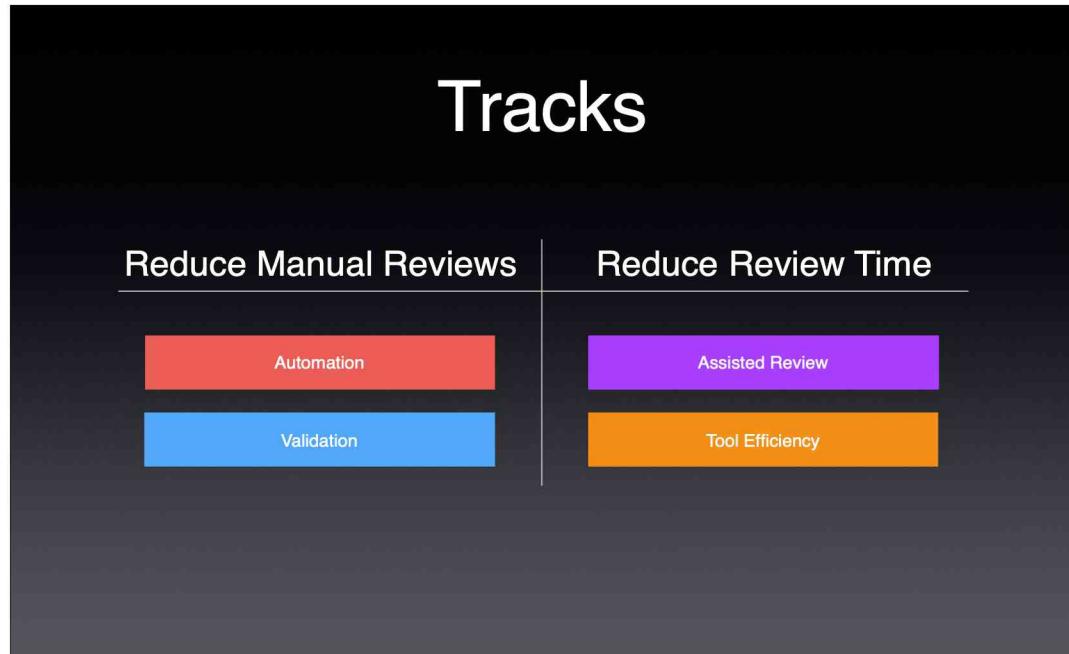


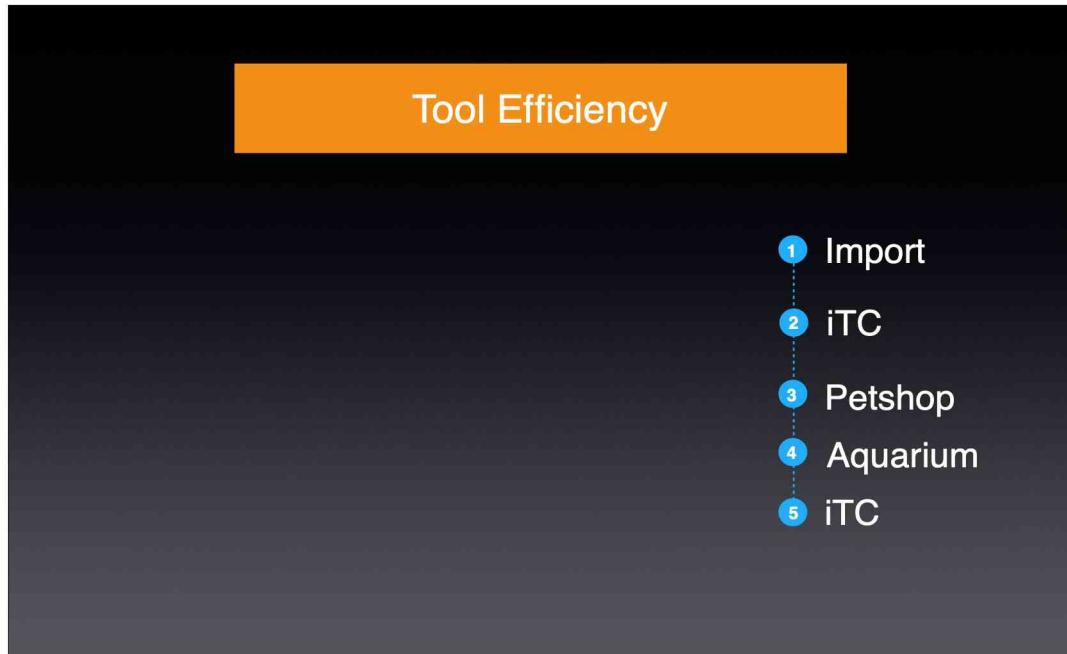
Existing Flow

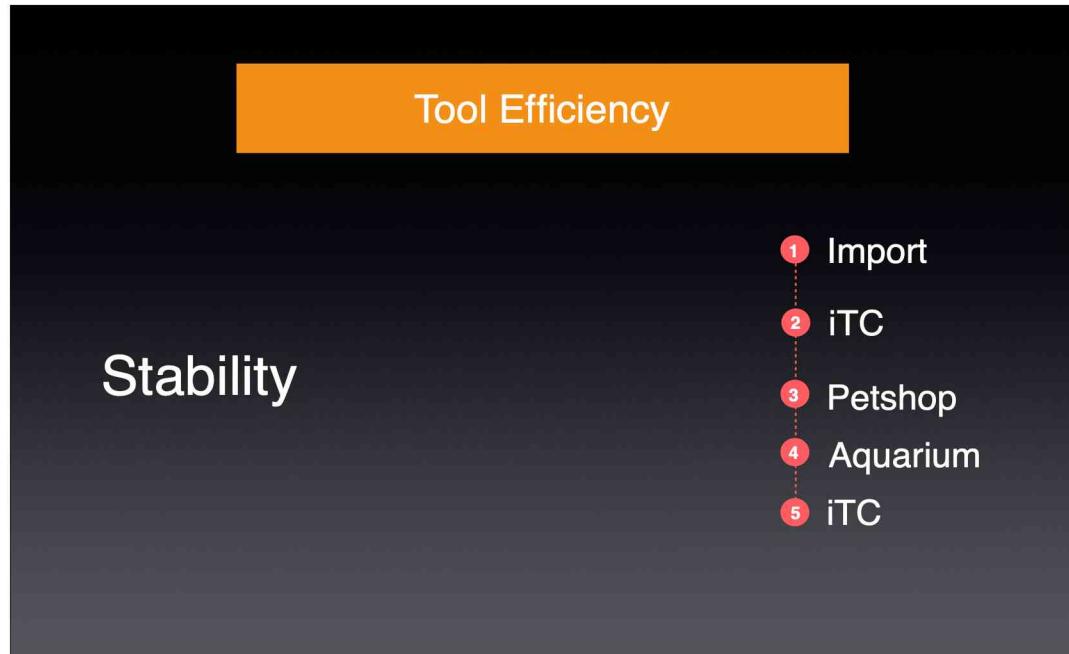


Existing Flow









Stability

Short Term

- Improved deployment playbook
- Improve monitoring & alerting
- Slow rollout deployment pool

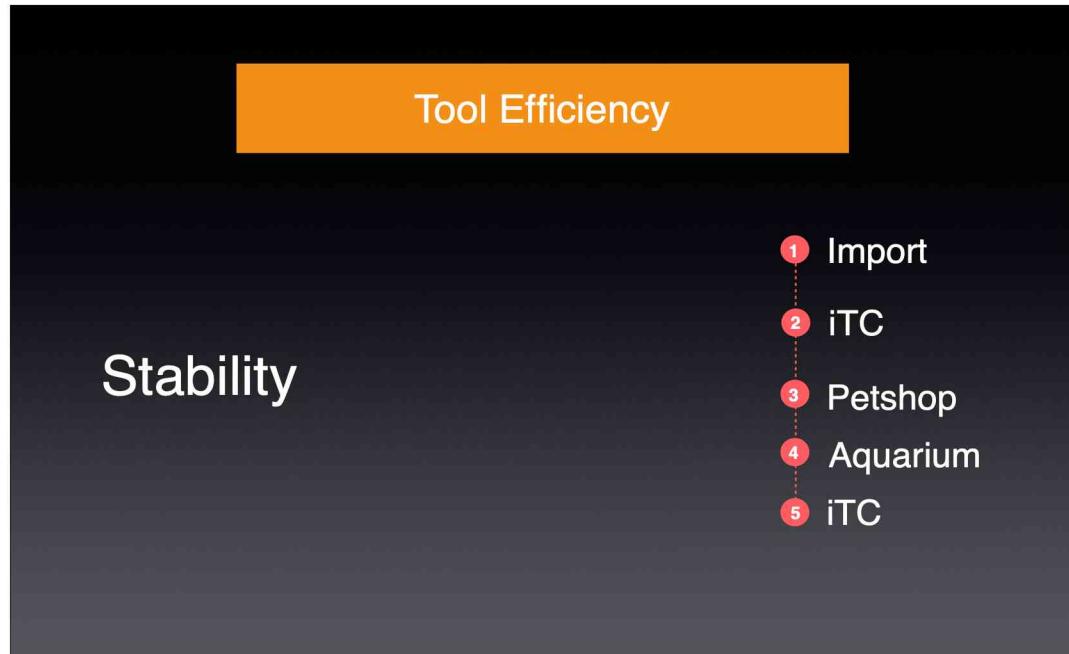
Long Term

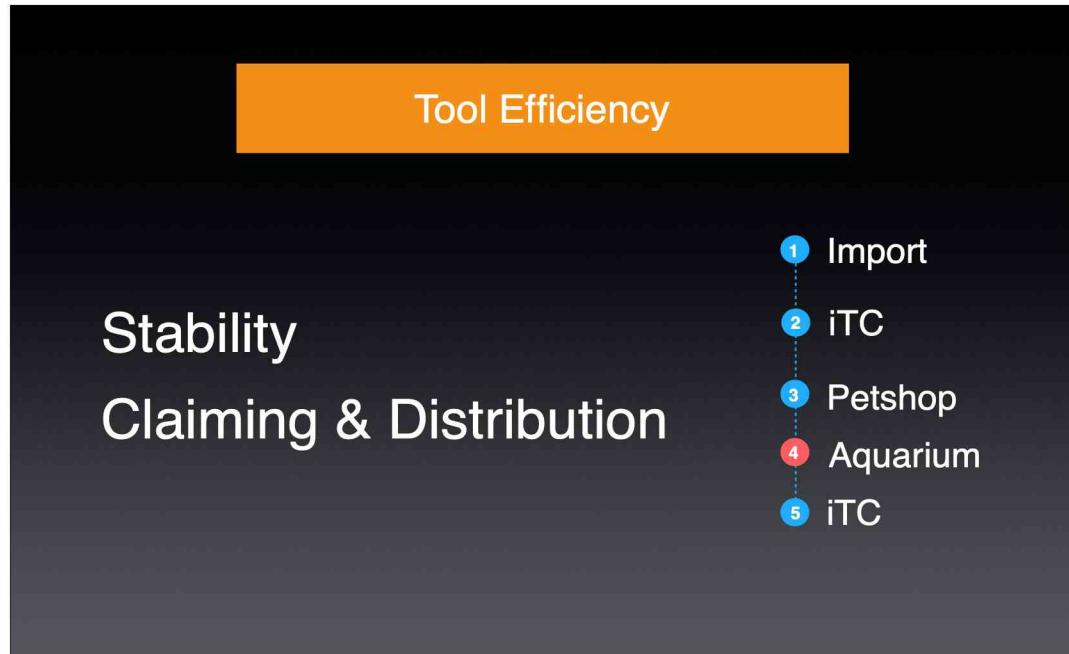
- Infrastructure improvements (in progress & ongoing)
- Aquarium offline mode

Slimmed it down

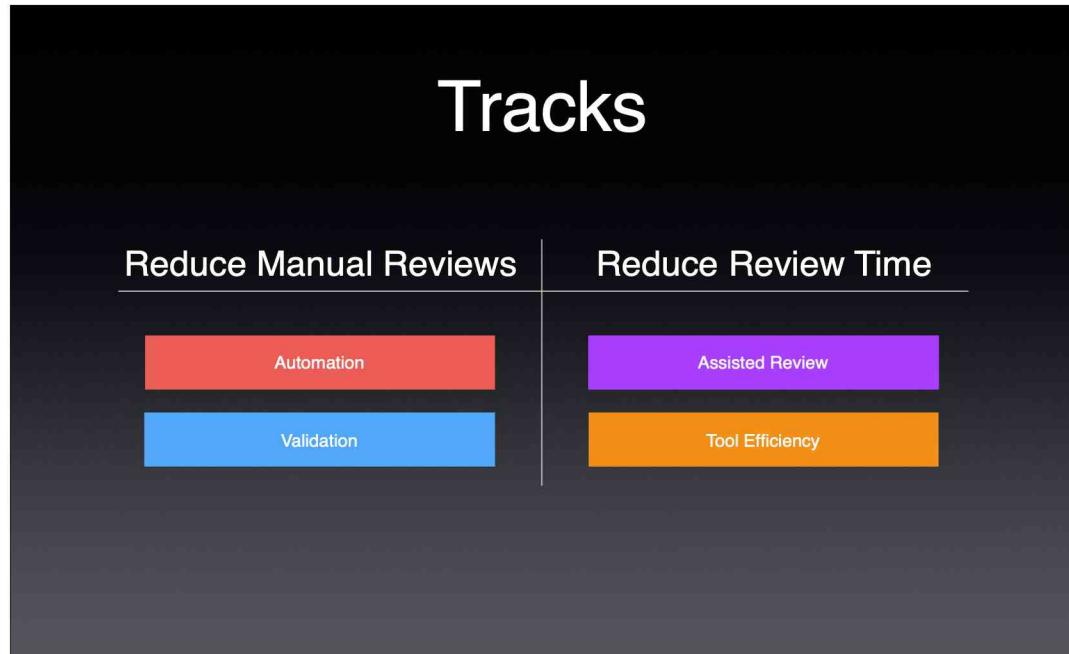
Matt's Note: Ton of scam apps in store, it's called out in the reviews. To good to be true.

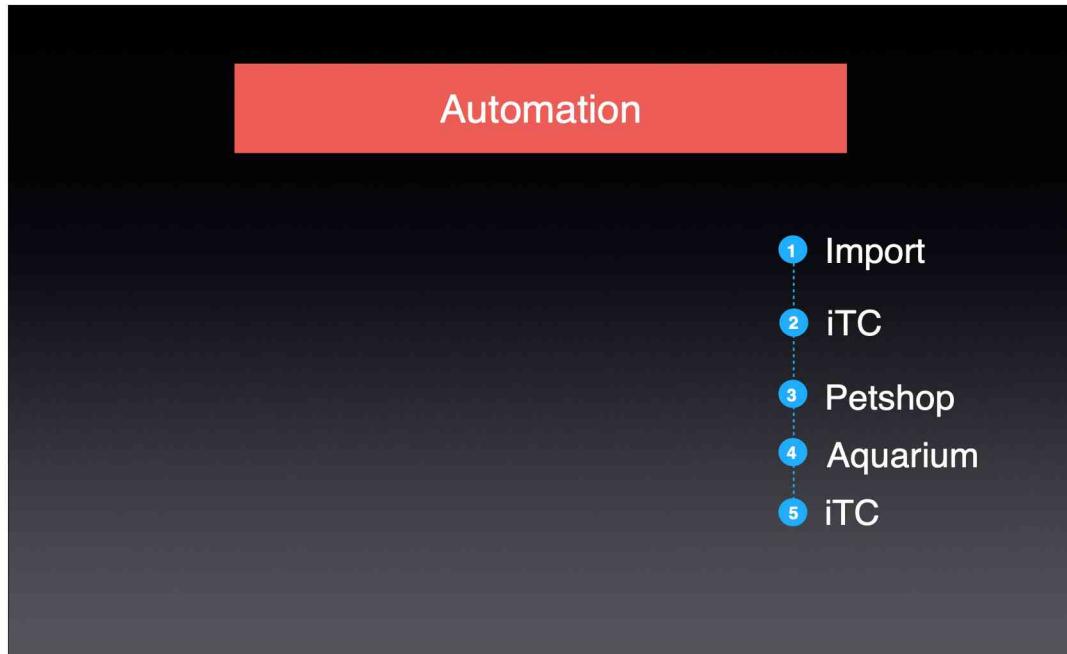
And we can continue to audit catalog for scam apps

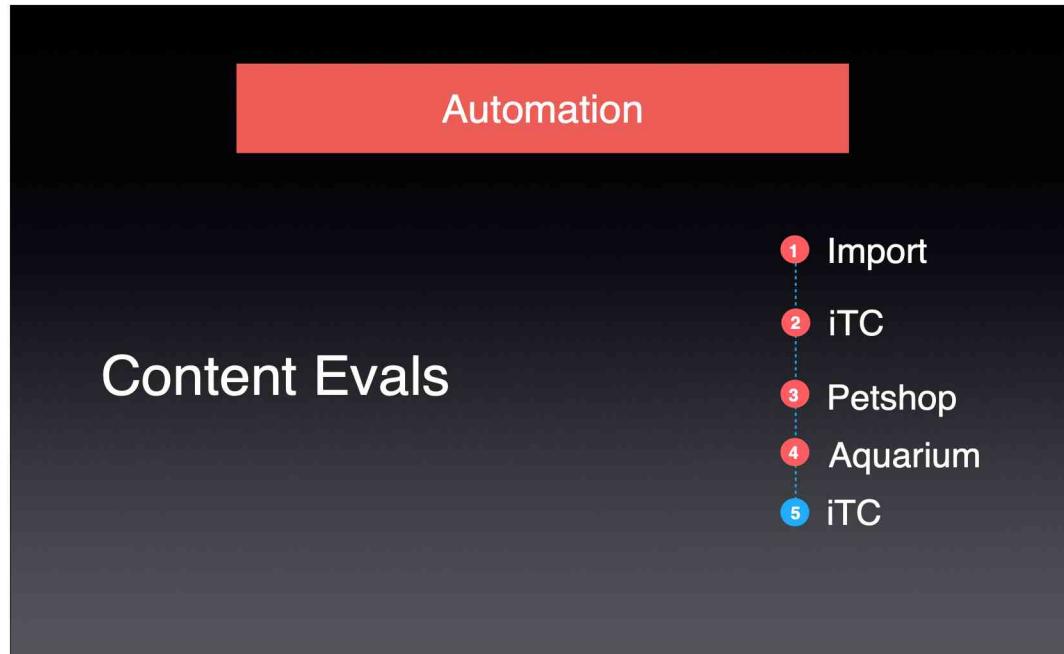




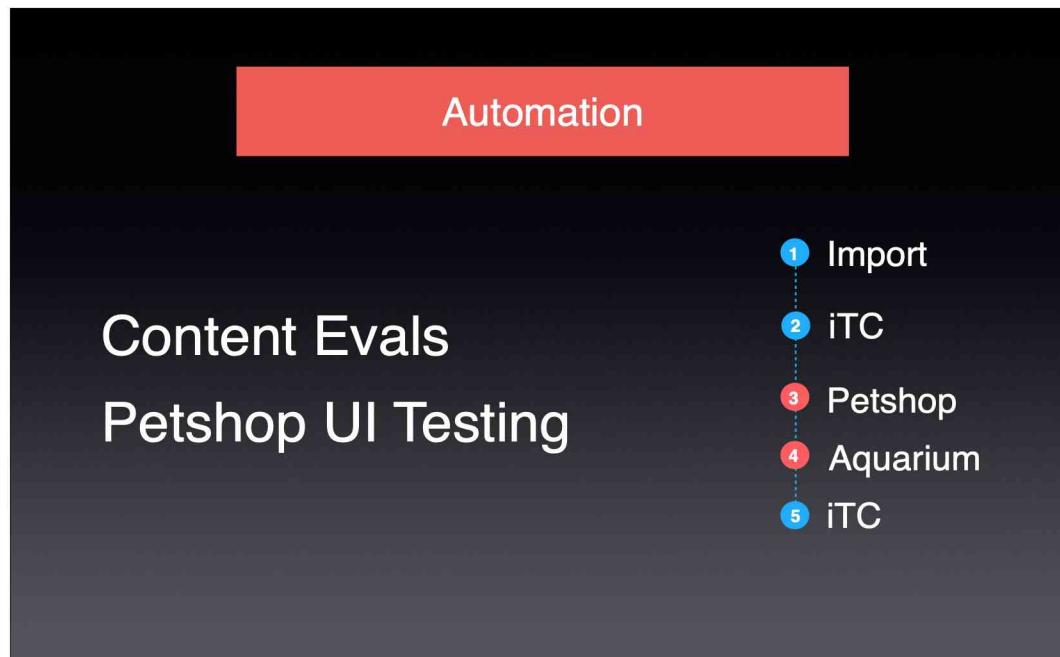


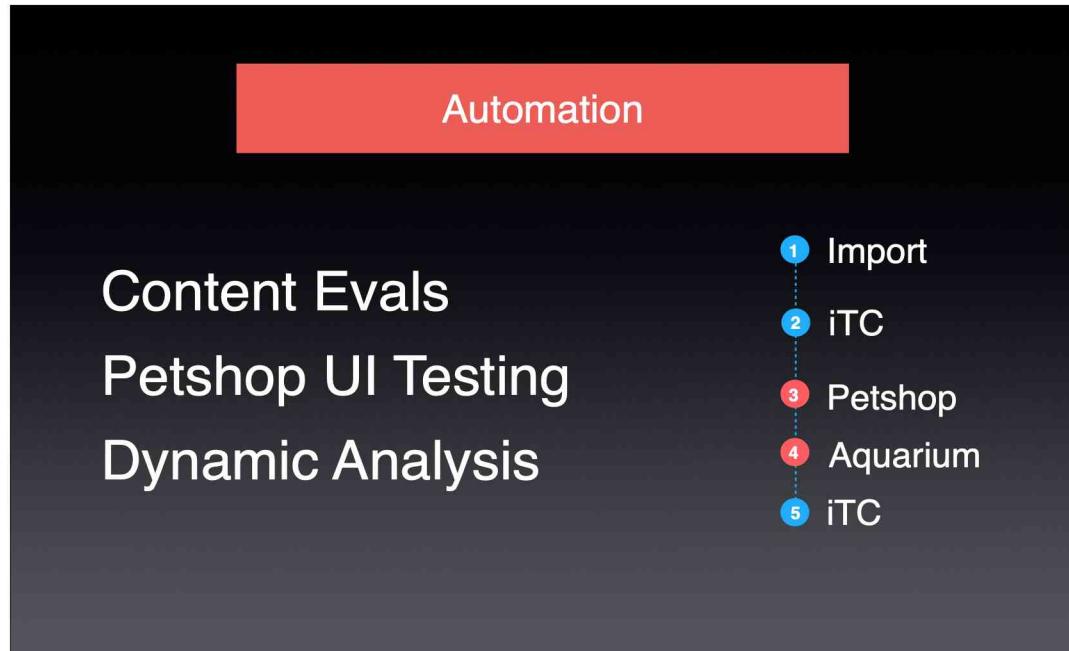






Evals were successful in books, touch on this





Dynamic Analysis

SPI	Network
Crash Logs	Memory
CPU	File System Access
Battery Usage	iCloud Usage
IDFA Usage	canOpenURL
Link Analysis	Text Analysis
Screenshot Recording	Video Recording
UI Testing	Access Contacts
Location Services	Access Photos
Access Microphone	Access Bluetooth
Access Camera	Access Health
Access HomeKit	Access Motion & Fitness
Use Apple Pay	Use IAP

Dynamic Analysis

SPI	Network
Crash Logs	Memory
CPU	File System Access
Battery Usage	iCloud Usage
IDFA Usage	canOpenURL
Link Analysis	Text Analysis
Screenshot Recording	Video Recording
UI Testing	Access Photos
Location Services	Access Contacts
Access Microphone	Access Bluetooth
Access Camera	Access Health
Access HomeKit	Access Motion & Fitness
Use Apple Pay	Use IAP

● Functionality

Dynamic Analysis

SPI	Network
Crash Logs	Memory
CPU	File System Access
Battery Usage	iCloud Usage
IDFA Usage	canOpenURL
Link Analysis	Text Analysis
Screenshot Recording	Video Recording
UI Testing	Access Photos
Location Services	Access Contacts
Access Microphone	Access Bluetooth
Access Camera	Access Health
Access HomeKit	Access Motion & Fitness
Use Apple Pay	Use IAP

● Functionality ● Safety

Dynamic Analysis

SPI	Network
Crash Logs	Memory
CPU	File System Access
Battery Usage	iCloud Usage
IDFA Usage	canOpenURL
Link Analysis	Text Analysis
Screenshot Recording	Video Recording
UI Testing	Access Photos
Location Services	Access Contacts
Access Microphone	Access Bluetooth
Access Camera	Access Health
Access HomeKit	Access Motion & Fitness
Use Apple Pay	Use IAP

● Functionality ● Safety ● Diagnostics

Dynamic Analysis

SPI	Network
Crash Logs	Memory
CPU	File System Access
Battery Usage	iCloud Usage
IDFA Usage	canOpenURL
Link Analysis	Text Analysis
Screenshot Recording	AV Recording
UI Testing	Access Photos
Location Services	Access Contacts
Access Microphone	Access Bluetooth
Access Camera	Access Health
Access HomeKit	Access Motion & Fitness
Use Apple Pay	Use IAP

- Functionality
- Safety
- Diagnostics
- User Experience

Dynamic Analysis

SPI	Network
Crash Logs	Memory
CPU	File System Access
Battery Usage	iCloud Usage
IDFA Usage	canOpenURL
Link Analysis	Text Analysis
Screenshot Recording	AV Recording
UI Testing	Access Photos
Location Services	Access Contacts
Access Microphone	Access Bluetooth
Access Camera	Access Health
Access HomeKit	Access Motion & Fitness
Use Apple Pay	Use IAP

- Functionality
- Safety
- Diagnostics
- User Experience
- Input

Dynamic Signature

SPI	Network
Crash Logs	Memory
CPU	File System Access
Battery Usage	iCloud Usage
IDFA Usage	canOpenURL
Link Analysis	Text Analysis
Screenshot Recording	AV Recording
UI Testing	Access Photos
Location Services	Access Contacts
Access Microphone	Access Bluetooth
Access Camera	Access Health
Access HomeKit	Access Motion & Fitness
Use Apple Pay	Use IAP

1.0 Dynamic Signature



Static Signature

Screenshots Preview
IAP Description
Size Keywords
Name Localizations
What's New Static Analysis
Entitlements RDiff
Assembly Analysis Strings

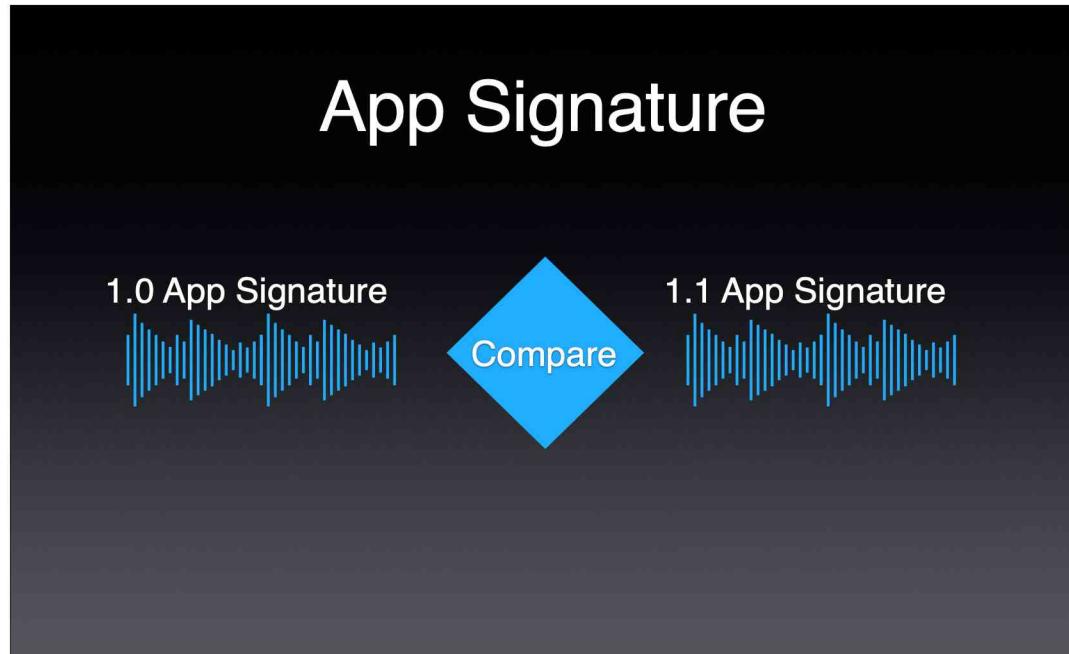
1.0 Static Signature

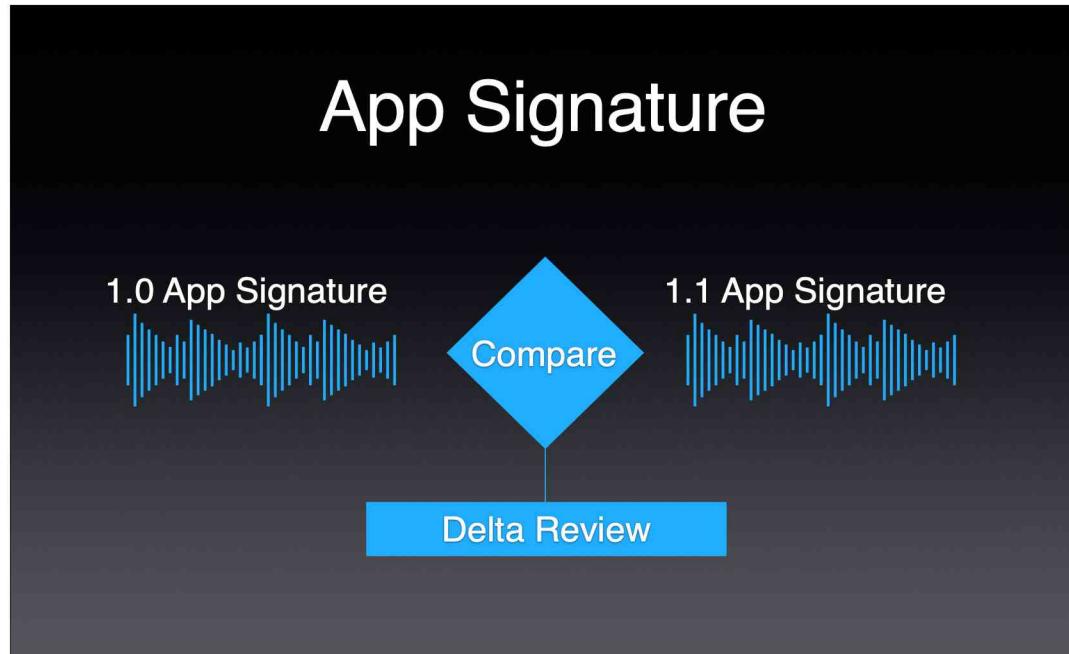


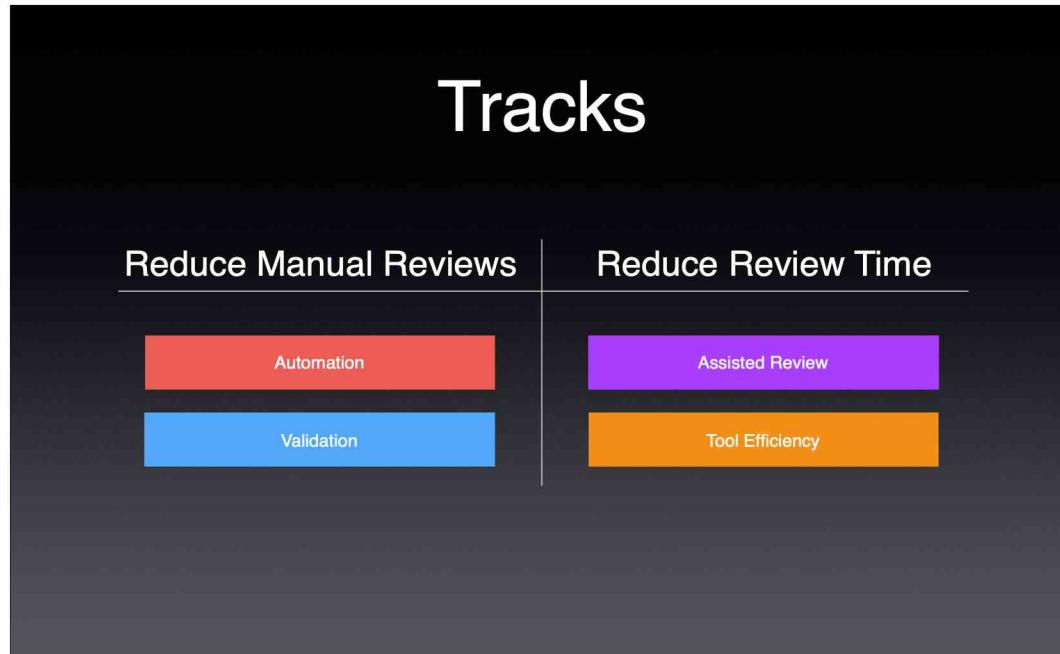
App Signature

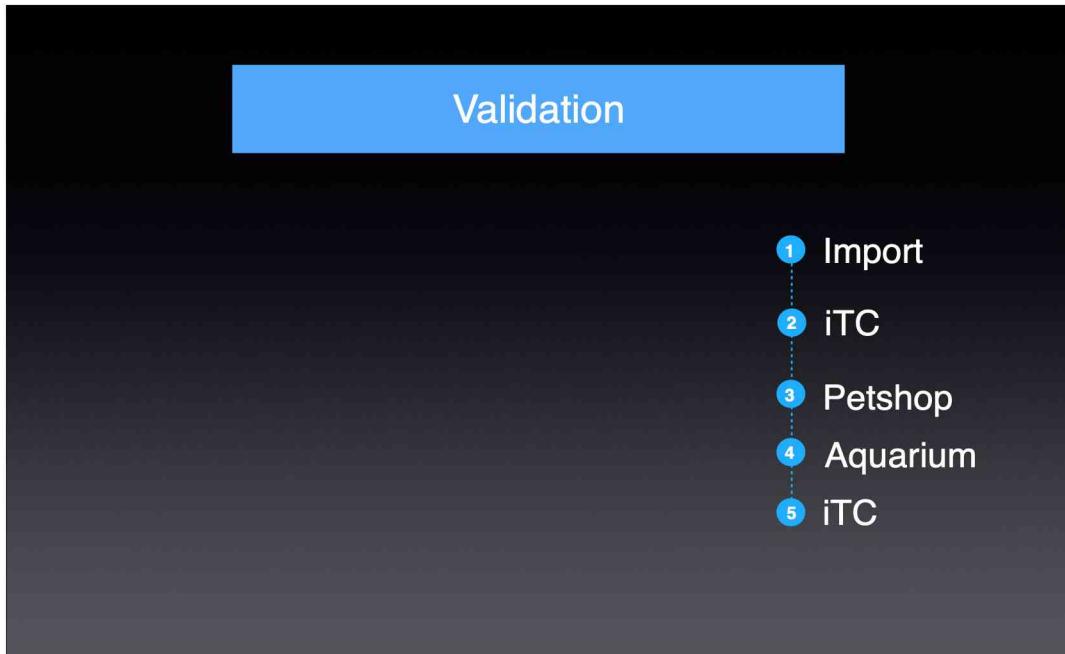
1.0 Static Signature + 1.0 Dynamic Signature = 1.0 App Signature

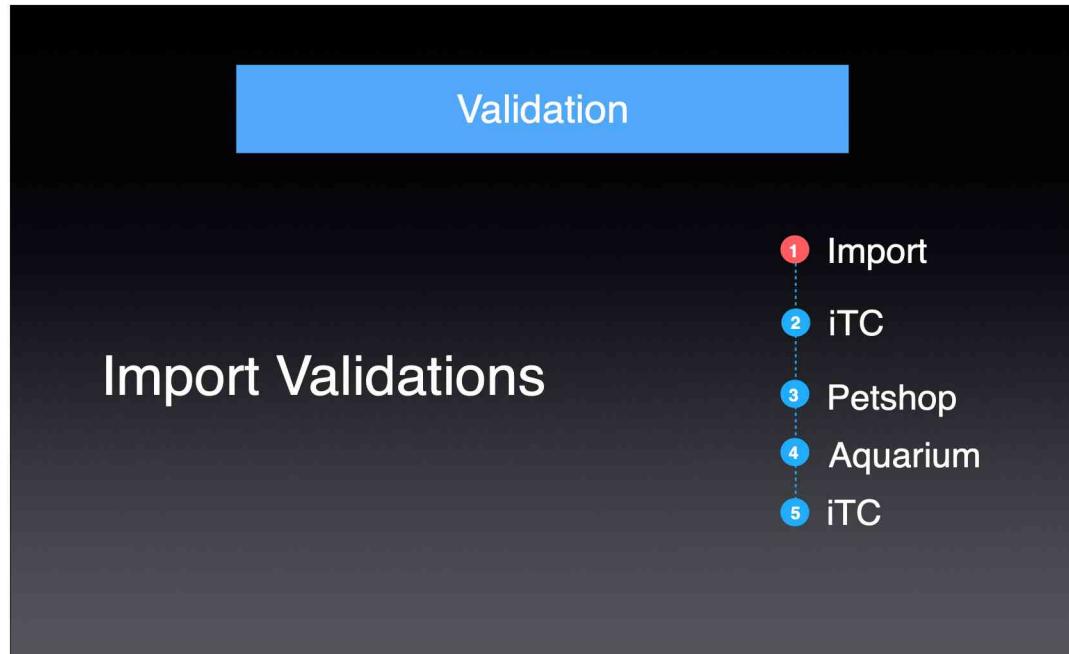


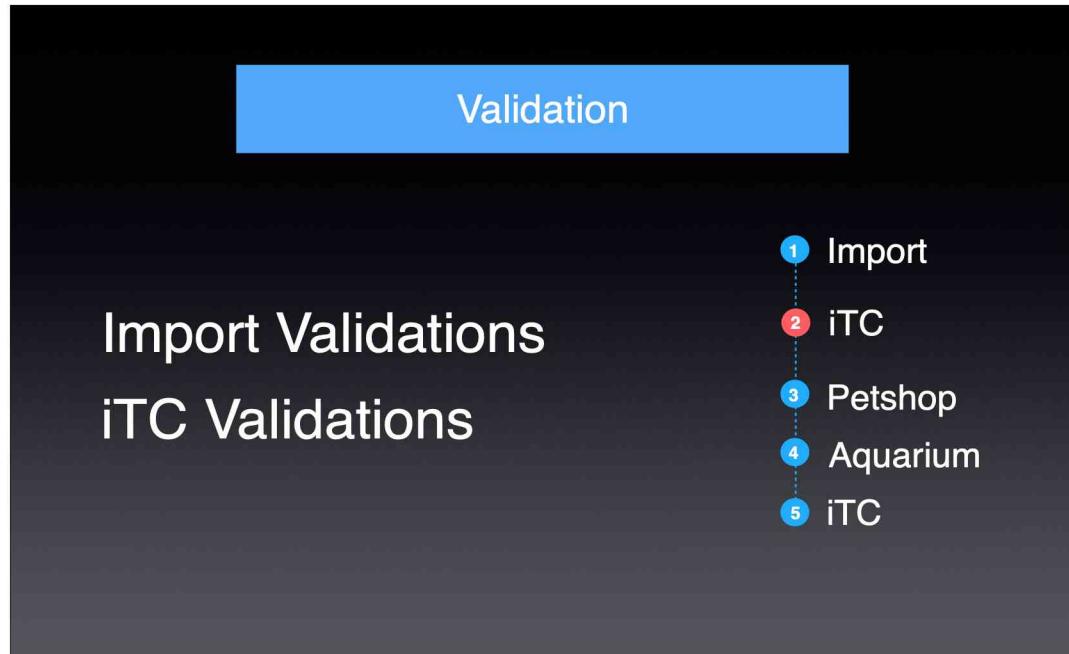


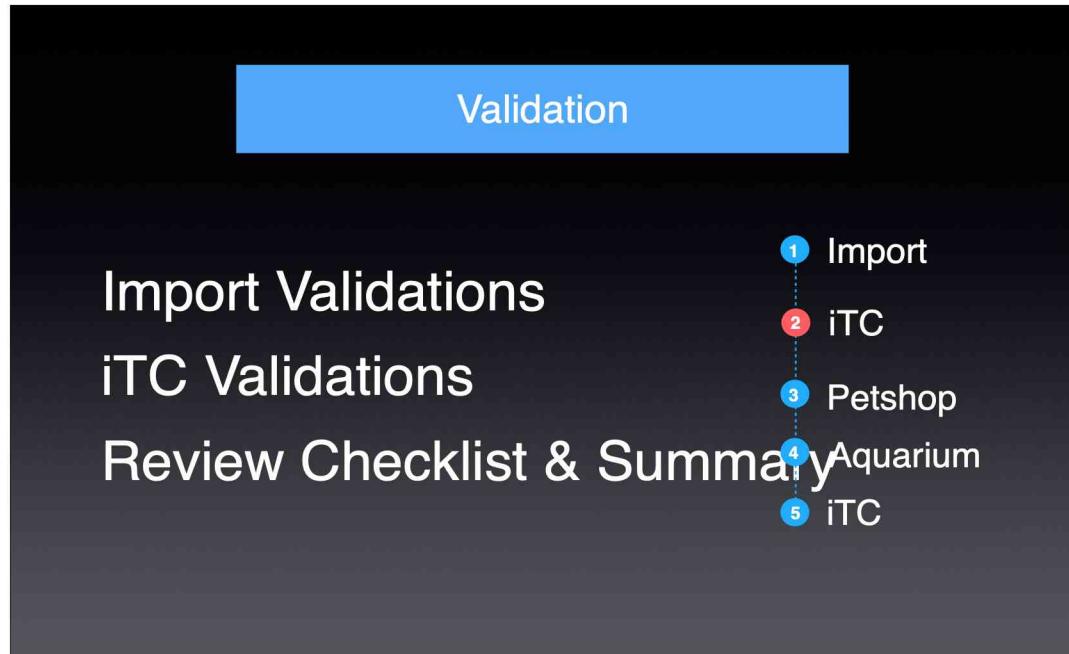




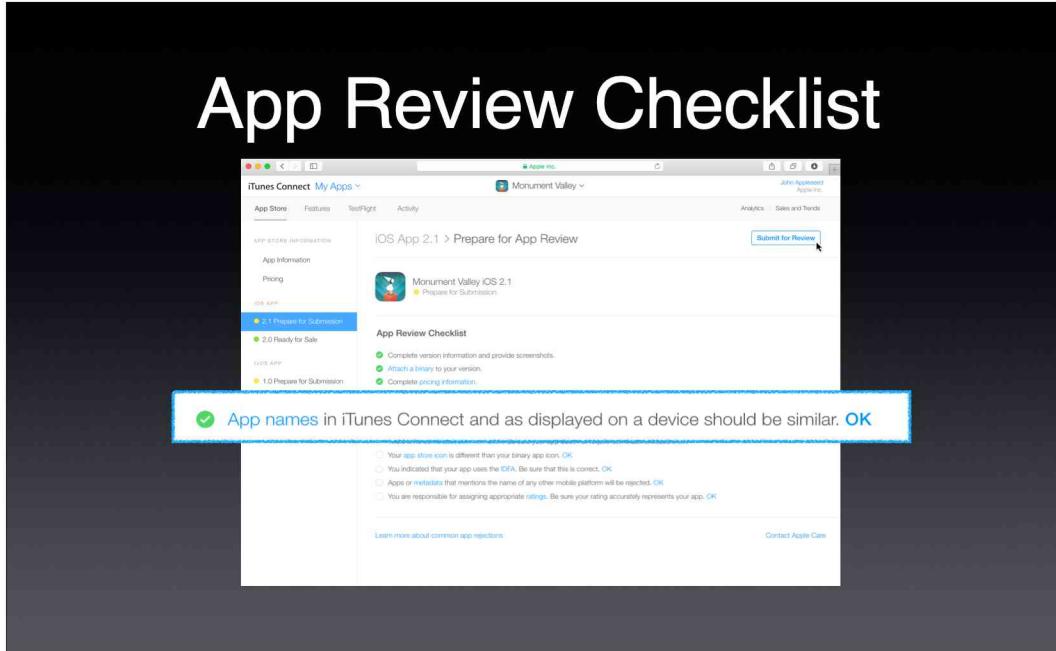


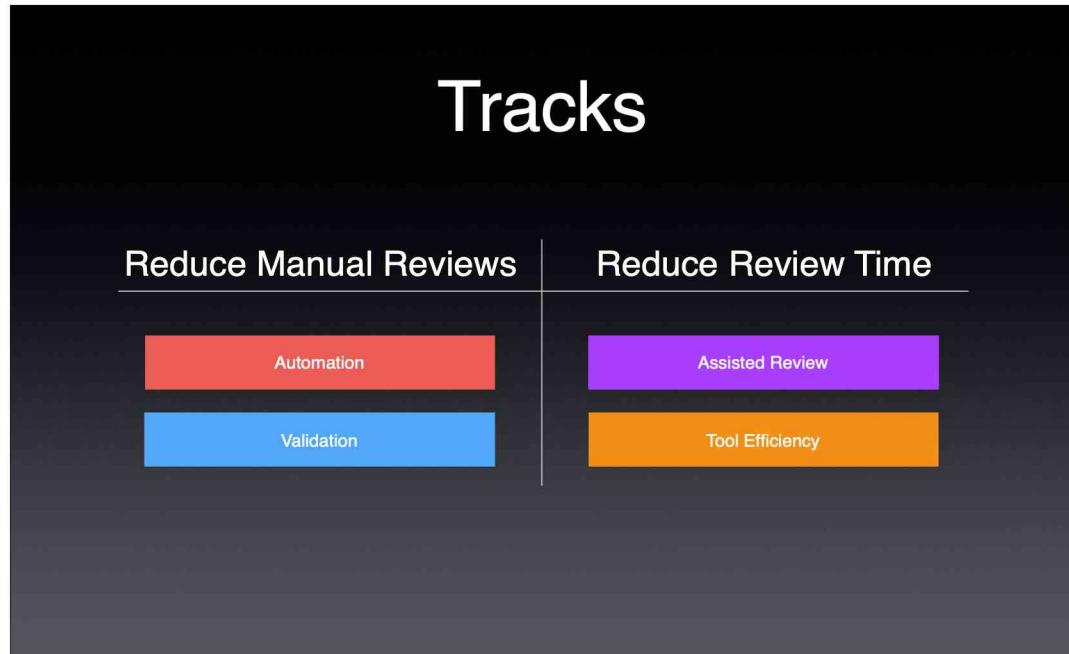


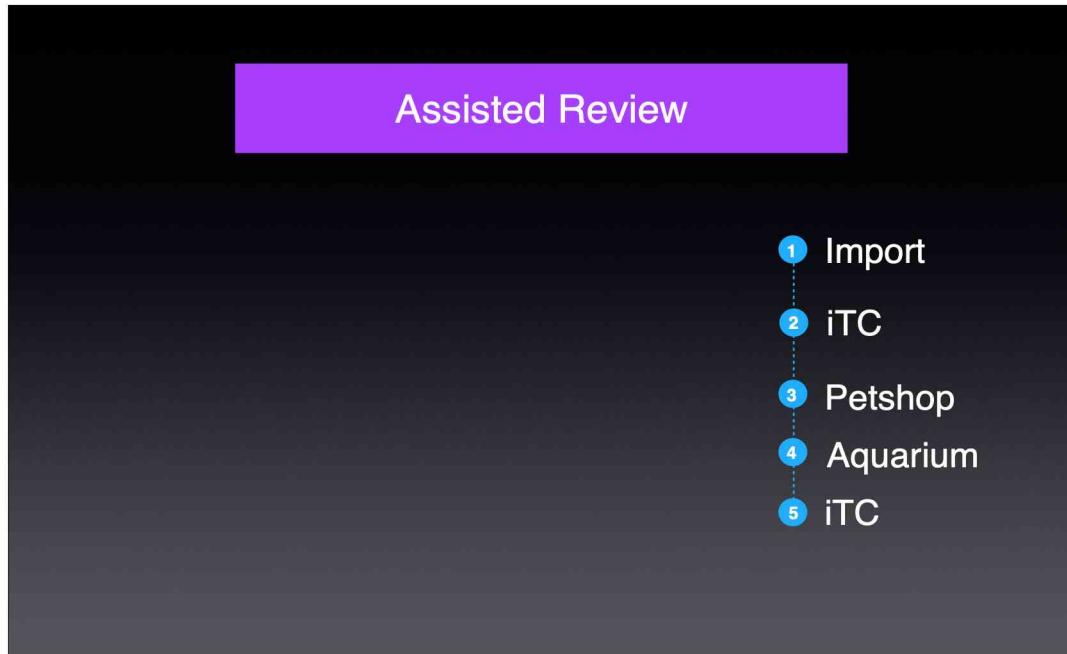




App Review Checklist









Delta Review

The screenshot shows a search result for "Current Aquarium" on the Delta Review platform. The top navigation bar includes tabs for English, Overview, Provider, Notes, Details, and Bad Words. A "Launch" button and a "Claimed by Evayn Burns" badge are also present. The main content area displays the following details:

- Name:** Netflix > Entertainment
- Categories:** Entertainment
- Privacy URL:** <https://www.netflix.com/privacypolicy>
- Privacy Text:** This Privacy Policy explains our policy regarding the collection, use, disclosure and transfer of certain information, including your personal information, by the Netflix family of companies ("Netflix")
- Computed Rating:** CV, RV, RV+, Pr, MT, HF, Med, AID, Ga, Sk, Sx+, Web, Ga+, 12+ >
- Kids Age Band:** None

Delta Review

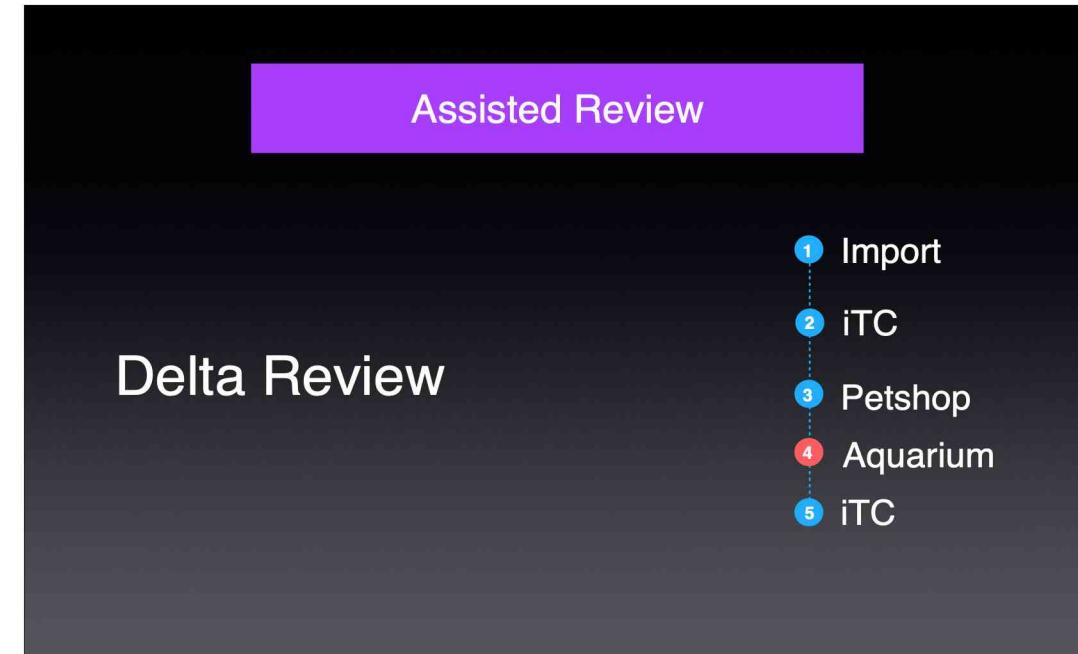
Change Detection

The screenshot displays the Delta Review interface for the Netflix application. At the top, there's a header bar with the Netflix logo, the text "Netflix, Inc.", "Apple TV Template + 2.0.6 (Pending Analysis)", and "3 Platforms, 2 Beta Trains". To the right are buttons for "Launch" and "Edit". Below the header, there are tabs for "English", "Overview", "Provider", "Notes", "Details", and "Bad Words". The main content area is titled "SHARED ATTRIBUTES" and lists the following data:

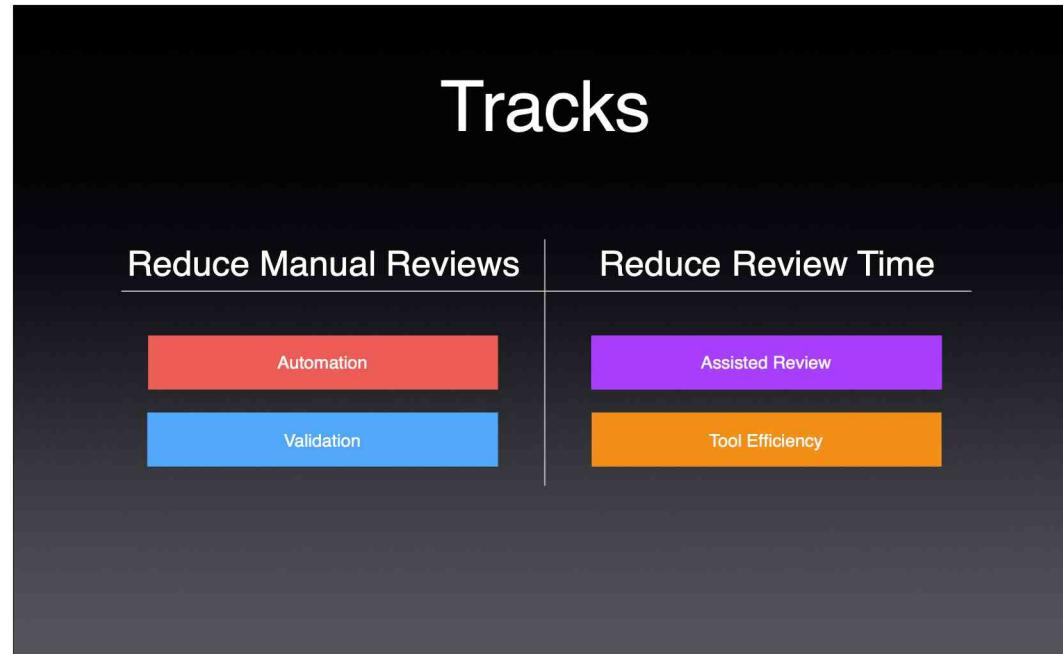
- Name: Netflix > Entertainment >
- Categories: Entertainment
- Privacy URL: <https://www.netflix.com/privacypolicy>
- Privacy Text: A link to the privacy policy text.
- Computed Rating: CV, RV, RV+, Pr, MT, HF, Med, AID, Ga, Sk, Sx+, Web, Ga+, 12+ >
- Kids Age Band: None

Delta Review

The screenshot shows a dark-themed user interface for 'Delta Review'. At the top, there's a navigation bar with tabs for 'English' (selected), 'What's New', 'Provider', 'Notes', 'Details', and 'Bad Words'. On the left, a large button labeled 'What's New' is visible. The main content area displays a card for 'Netflix' (claimed by Evayn Burns). The card includes the Netflix logo, the name 'Netflix', its provider 'Netflix, Inc.', and its version 'Apple TV Template • 2.0.6 (Pending Analysis) 3 Platforms, 2 Beta Trains'. Below this are sections for 'SHARED ATTRIBUTES' (Name: Netflix, Categories: Entertainment, Lifestyle) and 'PLATFORM ATTRIBUTES' (Copyright: 2011 Netflix, Inc.).







Changed title

Resources Needed

Area	#
Data / APIs	4
Aquarium	2
Petshop UI Testing	1
Content Evaluations	2
Dynamic Analysis	6
App Review Checklist / Summary	1
Infrastructure	4
Total	20

Potential Acquisition

SourceDNA

5 Engineers, Local Team

Experts in cryptography, binary & security analysis

Well Aligned Talent & Tools

Static Analysis

Code Similarity

Potential Acquisition

AppThority

30 Employees (20-25 engineers), Local Team

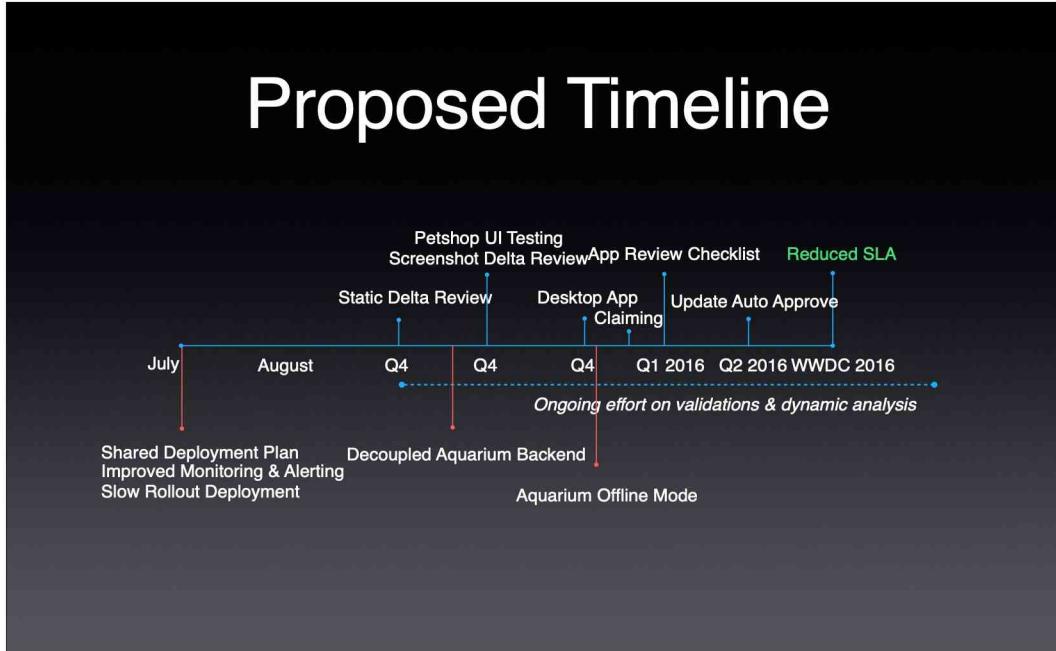
Well Aligned Talent & Tools

Static Analysis

Dynamic Analysis

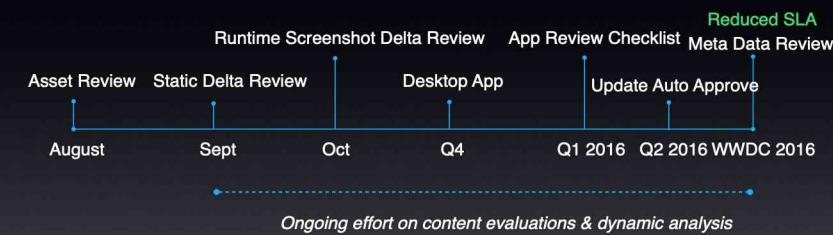


Proposed Timeline



Changed title

Proposed Timeline



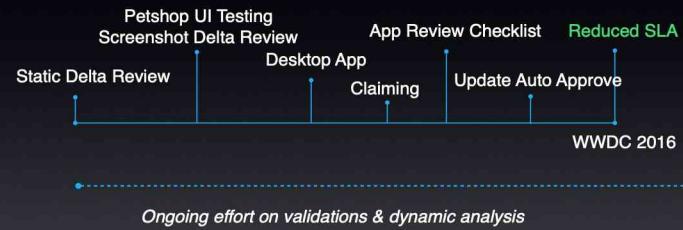
Changed title

Proposed Timeline



Changed title

Proposed Timeline



Changed title