

React Migration + Design System Adoption

Case Study

Objective

Migrate the dashboard to a modern tech stack that would allow for easy adoption of our design system, enable teams to deliver elegant features faster and solve existing customer pain points.

Goal

Strategically migrate pages to React while maintaining alignment with our current Product roadmap to avoid any disruptions to feature delivery.

Risks

- Not enough time to conduct much user research.
- We could worsen the experience if it became too much of a Frankenstein of old and new UI.
- Recreating pages on a completely new tech stack introduces a lot of unknowns that could risk disrupting the delivery of key product features.

How we mitigated the risks

- Not enough time to conduct much user research.
 - We did a thorough analysis of open support issues related to the usability of the dashboard and longstanding UX requests from customers.
- We could worsen the experience if it became too much of a Frankenstein of old and new UI.
 - We decided NOT to redesign any global elements such as any main navigational elements
- Recreating pages on a completely new tech stack introduces a lot of unknowns that could risk disrupting the delivery of key product features.
 - Our Core Experience engineers began joining design critiques so they could assess any unknowns early and plan for any new UI components required.

The Design Process

(Typical product development process for a new feature)



(Forking off from the traditional product development process)



Support Tickets

Interviews with SEs

Design + CX

UI Component Specs

Before (Angular)

ie. PM requests a feature be added to the playlist section

*This page is still on the old Angular tech stack and is not using our Design System

The screenshot shows the JW Player Dynamic Playlist interface. On the left, a sidebar contains links for Media Library, Playlists, Series, Instant Live, Imports, Tags, Players, Apps, Advertising, Social Posts, Showcase, Analytics, Real Time, Custom Reports, and a status indicator 'All Systems Operational'. The main content area has a title 'Dynamic Playlist' with a subtitle 'Brian Test'. It displays 'ITEMS: 10 LENGTH: 30:50.00' and 'PLAYS LAST 30 DAYS: 0'. Below this are tabs for 'BASIC', 'ADVANCED', and 'DEVELOPERS'. Under 'Order', there's a 'Sort by' dropdown set to 'Most Recently Published'. The 'Filter by Tag' section includes 'Include videos by tag' (OFF) and 'Exclude videos by tag' (OFF). The 'List Length' section shows 'Include a Maximum of 10 items of available 0 item'. A 'Delete this playlist' link is at the bottom. To the right, a 'DYNAMIC PLAYLIST PREVIEW' section lists ten video items with thumbnails, titles, and durations:

Video Item	Thumbnail	Title	Duration
US Women's National Team 2023-02-09 at 21:55		US Women's National Team 2023-02-09 at 21:55	00:04:31
US Women's National Team 2023-02-09 at 20:24		US Women's National Team 2023-02-09 at 20:24	00:06:49
Test Preview 2023-02-09 at 20:22		Test Preview 2023-02-09 at 20:22	00:00:12
My Mind And Me		My Mind And Me	00:02:19
Katie Onboarding 2022-09-27 at 20:11		Katie Onboarding 2022-09-27 at 20:11	00:03:46
Copy of Cruella-trailer-1 l320 / *		Copy of Cruella-trailer-1 l320 / *	00:01:32
New USWNT clip		New USWNT clip	00:01:24
US Women's National Team 2022-06-15 at 15:18		US Women's National Team 2022-06-15 at 15:18	00:07:09
Testing for Player Demo 2022-05-26 at 13:27		Testing for Player Demo 2022-05-26 at 13:27	00:02:32
Test Preview 2022-04-04 at 14:30		Test Preview 2022-04-04 at 14:30	00:00:36

New Design (React)

The screenshot displays the JW Player dashboard interface, specifically the 'Simi Dash Content | Admin' section. On the left, a sidebar contains navigation links for Media Library, Playlists, Instant Live, Imports, Players, Apps, Advertising, Social Posts, Analytics, Real Time, Custom Reports, and a status indicator 'All Systems Operational'. The main content area shows a 'Playlist Preview' for '103 Vegan Recipes for Delicious Plant-Based Meals'. The preview lists ten items from the playlist, each with a thumbnail image, title, and duration:

- 01. Winter Stew (4:30)
- 02. Creamy Vegan Red Pepper Pasta With Garlic Bread Breadcrumbs (2:59)
- 03. Braised Butternut Squash in Spiced Coconut Gravy (5:00)
- 04. Braised Butternut Squash in Spiced Coconut Gravy (5:00)
- 05. Vegan Roasted Garlic-Potato Enchiladas (4:30)
- 06. Vegan Roasted Garlic-Potato Enchiladas (4:30)
- 07. Roasted Cauliflower with Coconut-Turmeric Relish (7:00)
- 08. Chickpea-Mushroom Burgers (2:59)
- 09. Brothy Noodle Bowl with Mushrooms and Chiles (4:30)
- 10. Creamy Squash Risotto With Toasted Pepitas (5:30)

Below the preview, a footer indicates 'Media: 27' and 'Duration: 1:29:30'. To the right of the preview, there are sections for 'Playlist Metadata' and 'Developer'. The 'Developer' tab is active, containing fields for Playlist ID ('tCKiXzou'), RSS URL ('https://dns-test.monifarachelparra.com/v2/playlist'), and JSON URL ('https://dns-test.monifarachelparra.com/v2/playlist'). A note at the bottom of this section points to 'Documentation'. A large 'Delete Playlist' button with a warning message 'Delete This cannot be undone' is also present.

Identified UI Components

Draggable Media Item

06. Broad Peak
40 min

Media Group Header

S1: Climbing the Northwest
The team at Dunder Mifflin adjusts to life in the public eye

Media Group Action Bar

↑ Episode Ordering + Add Media

Media Group Divider

★ Bonus Content

Media Group Footer

Episodes: 10 | Duration: 6 hr 40 min

Playlists Use Case

↑ Episode Ordering + Add Media

06. Broad Peak
40 min

02. Nepal Himalayas
40 min

03. Yosemite
40 min

04. Mount Everest
40 min

05. Makalu
40 min

06. Patagonia
40 min

07. El Capitan
40 min

08. Mount Tai
40 min

09. Peru
40 min

10. Mount Rainier
40 min

Episodes: 10 | Duration: 6 hr 40 min

Series Management Use Case

S1: Climbing the Northwest
Experience big mountaineering in the Great Pacific Northwest

S1: Climbing Nepal
Follow big climbers in the most challenging peaks in the world

↑ Episode Ordering + Add Media

01. Nepal Himalayas
40 min

02. Mount Everest
40 min

03. Makalu
40 min

04. Lhotse
40 min

05. Northern Kanchenjunga
40 min

06. Khumbu Mahalangur
40 min

07. Manaslu
40 min

★ Bonus Content

101. Behind The Scenes
20 min

S3: Climbing South America
Chase winter and big mountain climbs in South America

Seasons: 4 | Duration: 20 hrs

Before (Angular)

JWPLAYER

- Upload
- Developer Portal
- Monica
- Settings

Media Library

- Playlists
- Series
- Instant Live
- Imports
- Tags

Players

- Apps
- Advertising
- Social Posts
- Showcase

Analytics

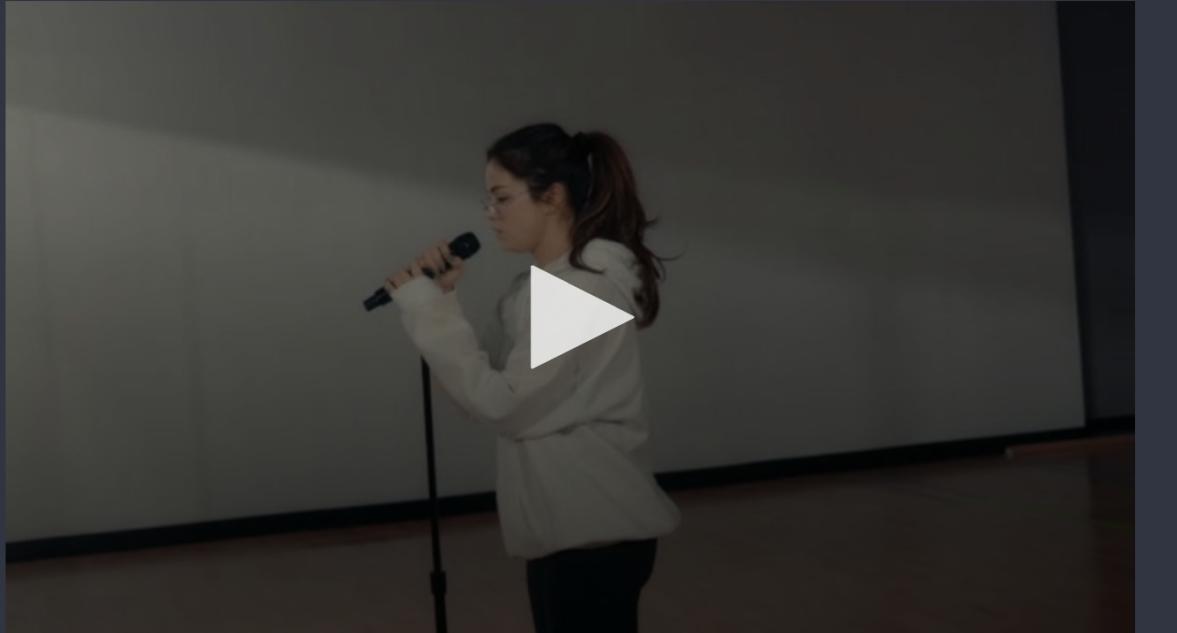
- Real Time
- Custom Reports

All Systems Operational

My Mind And Me

Video Summary

Media ID: 1W8MlgJi
Encoding Status: Ready
Publish Status: Ready
Type: Hosted Video
Duration: 00:02:20



METADATA

Title: My Mind And Me

Description: Adding a description helps with SEO and recommendations

Sunrise / Sunset

Publish Start Date: Dec 19, 2022
Publish Start Time (UTC): 22:25:00

That is Dec 19, 2022 5:25:00 PM in your local time.

Set an end date
End Date: _____
End Time (UTC): _____

Tags

Add a tag: Start typing a tag to include **ADD**

Suggested tags: 360+, android+, demo+, drama+, education+, europe+, mangos+, monoscopic+, news+, playback-rate+

Current tags: No tags on this video right now.

Category

New! Video Category may be automatically predicted, and you can change this at any time. [Learn more.](#)

Hobbies & Interests: _____

SHARE **EMBED**

After (React)

JWPLAYER

- Upload
- My Property
- Simi Dash Content | Admin
- Settings

Media Library

- Playlists
- Instant Live
- Imports

Players

- Apps
- Advertising
- Social Posts

Analytics

- Real Time
- Custom Reports

All Systems Operational

Nepal Himalayas

Basic Information **Advanced Settings**

Description

Mountain climbing in Nepal instantly became a passionate adventure treat for mountaineers after the country first opened doors to climbers back in 1949. Though the attempts to climb mountains started from the early years of the 20th century but no one had been able to claim triumph over it until 1953 when Sir Edmund Hillary and Tenzing Norgay set their first ever foot on the summit of Mt. Everest.

Tags

Add as: Single tag Multiple tags

Search for or create a new tag **Add**

CURRENT TAGS: mountaineering, climbing, sherpa, nepal

Category

Movies

Custom Fields

Key	Production Studio	Value	Big Sky Media
Key	Enter a key	Value	Enter a key

+ Add

Audience Retention 5,000 Total Viewers

Trim or Create Clips Video Duration: 00:38:42

Thumbnail

Motion ... Static ...



Video Page Permalink

https://

Delete Video

Delete This cannot be undone

Videos will be clipped to 10 seconds with no audio.

Images should be at least 1920px by 1080px.

This will be used as the fallback if videos does not load.

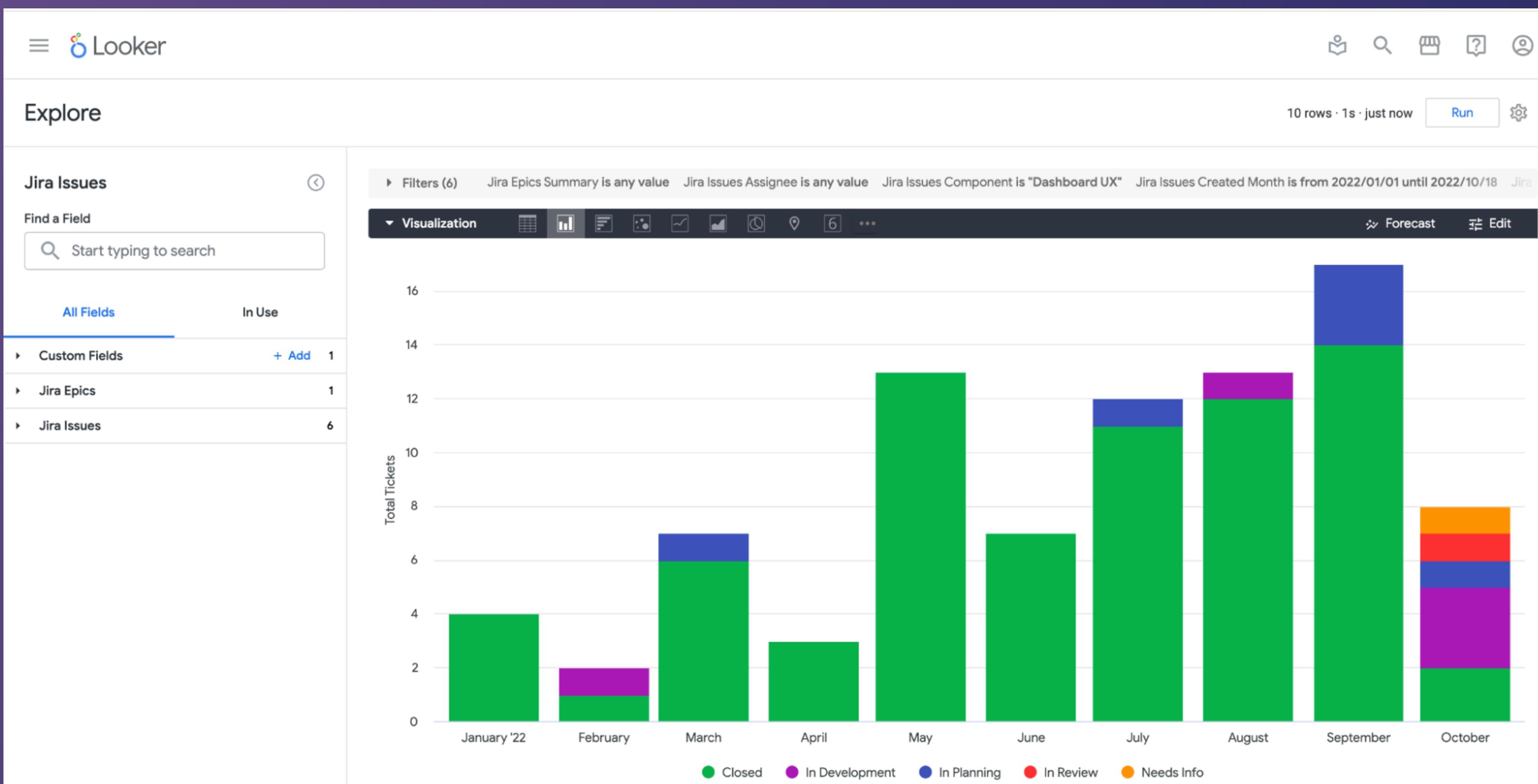
Tracking the React Migration Progress

The screenshot shows a Google Sheets spreadsheet with the following structure:

	A	B	C	D	E	F	G	H
1		Legacy Ng Route	New React Route	Description	Epic			
2	Est.Target Date	In Development						
3		Shovel Ready						
4	Q4	Playlists	/playlists/recommended/detail	Recommendations			Publisher	
5	Q4	Playlists	/playlists/list	List with all playlists			Publisher	
6		Designing & Refining						
7	Q4	Analytics	/analytics/overview	An overview of your current analytics			Core Experiences	
8		To Do						
9	Q1	Playlists	/playlists/recommendations	Search Playlist			Publisher	
10	Q1	Playlists	/playlists/recommendations	Article Matching			Publisher	
11		Completed & Released						
12	8/22/2022	Players	/players/basic_setup_jw8	/players/{player_id}	Player builder	CX-71	Build	Enroute / Core Experiences
13	8/22/2022	Players	/players/list	/players/	List of all players per property	CX-71	Testing	Enroute
14		Players	/players/downloads	/players/downloads	Player Downloads & Keys		Won't Do	Enroute
15		Playlists	/content/playlists/trending_detail		Trending playlist configuration	PUB-47	Won't Do	Publisher
16		Account	/account/api-credentials		Manage api credentials	FE-239	Done	
17		Account	/account/billing		Billing details	FE-240	Done	
18		Account	/account/profile		Profile & User settings	FE-241	Done	
19		Account	/account/properties		Properties overview	FE-242	Done	
20		Account	/account/property/detail		Properties detail	FE-243	Done	
21		Account	/account/usage		Account usage	FE-245	Done	
22		Account	/account/users		Manage users on account	FE-246	Done	
23		Ads	/ads/list		Ad schedule list	FE-434	Done	
24		Ads	/ads/detail		Ad schedule details	FE-449	Done	
25		Login & Home	/account/create		Confirm invite and create account	FE-320	Done	
26		Login & Home	/account/forgot		Forgot password form	FE-322	Done	
27		Login & Home	/account/reset		Reset Password	FE-321	Done	
28		Login & Home	/account/signup		Signup for a new account		Done	
29		Login & Home	/logout		Logout the user and end session		Done	
30		Login & Home	/welcome		Home page and overview		Done	
31		Misc	/content/caption-editor		Caption editor	WON'T DO		
32		Videos	/trim-and-clip		Trimming & Clipping tool for VOD and Live	FE-931	Done	
33		Misc	/social		Publish	FE-1009	Done	
34		Videos	/content/list		List of all media	FE-600	Done	
35		Videos	/content/detail		Detail for media	FE-646	Done	
36		Accounts	/account/upgrade		Account upgrades	FE-1046	Done	
37		Misc	/social		List Social Posts		Done	Publisher
38		Misc	/players/showcase		Manage your Showcase		WON'T DO	
39		MRSS Import	/content/import		MRSS import list		Done	Publisher
40		MRSS Import	/content/import/detail		MRSS import details		Done	Publisher
41		MRSS Import	/content/import/media		MRSS log of imported media		Done	Publisher
42	2/7/2022	Live Channels	/content/live/channels	/instant-live	Live Channels List	CX-21	Testing	Enroute
43	2/7/2022	Live Channels	/content/live/channels/detail	/instant-live/{channel_id}	Live Channels detail view	CX-21	Testing	Enroute
44	May/2022	Analytics	/analytics/rightnow	/analytics/real-time	Real time analytics	CX-80	Testing	OTT
45	7/12/2022	Custom Reports	/analytics/reports/list	/custom-reports	List of analytics reports	CX-22	Testing	Core Experiences
46	7/12/2022	Custom Reports	/analytics/reports/detail	/custom-reports/{report_id}	Manage an analytics report	CX-22	Testing	Core Experiences

Measuring the impact of the migration and our design system

- We can now react quicker to customer pain points and bugs.
- This means we can prevent tickets from sitting in Review for too long.
- The # of tickets closed per month has been trending up month over month.



Monitoring Customer Retention

Through integrated SurveyMonkey forms, we're also able to capture customer data such Net Promoter Scores.

Our current NPS score is 64.

