



Decision Support System: Pricing and Availability Analysis

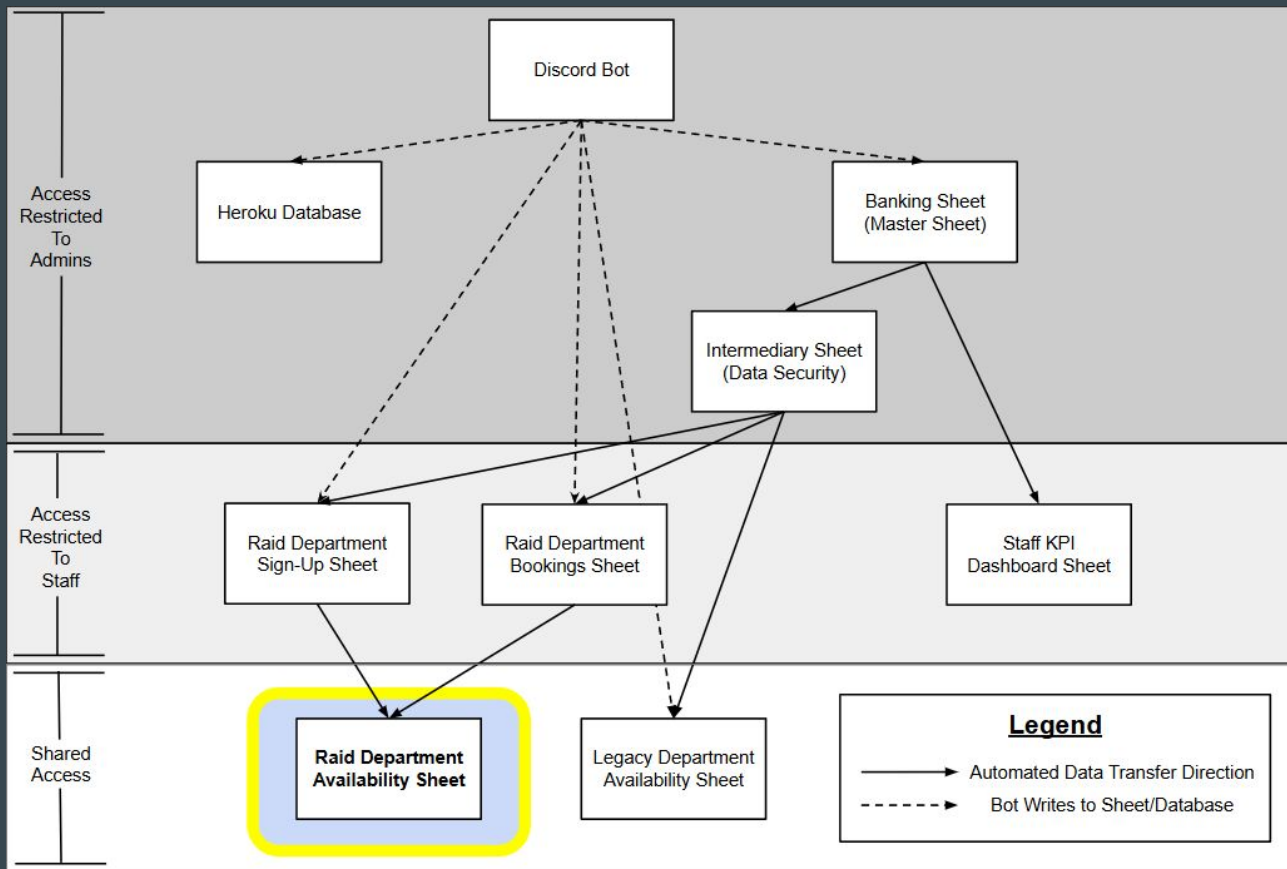


Lukas Ishihara

Founder / Head of Analytics and Automation, The Collective



Data Flow Overview



Examining: Raid Department Availability Sheet



Project Summary

I developed a Decision Support System that automatically transformed raw scheduling data into a centralized analytical calendar. This allowed the department to evaluate pricing and availability before the time of the sale, shifting the process from manual tracking to data-driven oversight across approximately \$500K in department sales.



Database

Raid ID	Name	In House / Guild	Difficulty	Date	Time	Buyer Count	Status	Full Clear Left	Micro-offset	Link To Sheet
109304	Pancake (Unsaved)	Guild ▾	Normal	9/22/2024	6:00 PM	8	Automated ▾	0	0.7500000014	Link To Sheet
209303	Soup (Saved)	Guild ▾	Heroic	9/23/2024	5:00 PM	5	Automated ▾	0	0.7083333347	Link To Sheet
109305	In House (Unsaved)	In House ▾	Normal	9/23/2024	5:00 PM	5	Automated ▾	0	0.7083333347	Link To Sheet
209402	Donut (Unsaved)	Guild ▾	Heroic	9/24/2024	5:00 PM	4	Automated ▾	0	0.7083333347	Link To Sheet
109403	Gumbo (Unsaved)	Guild ▾	Normal	9/24/2024	6:30 PM	10	Cancelled ▾	10	0.7708333347	Link To Sheet
109409	Chili (Unsaved)	Guild ▾	Normal	9/24/2024	9:30 PM	10	Automated ▾	0	0.8958333347	Link To Sheet
109401	Peanuts (Unsaved)	Guild ▾	Normal	9/25/2024	8:00 PM	8	Automated ▾	0	0.8333333348	Link To Sheet
209401	Waffles (7/8H Saved)	Guild ▾	Heroic	9/26/2024	4:00 PM	8	Automated ▾	0	0.6666666681	Link To Sheet
109416	In House (Unsaved)	In House ▾	Normal	9/26/2024	5:00 PM	10	Automated ▾	0	0.7083333348	Link To Sheet
109404	Tuna Mayo (Unsaved)	Guild ▾	Normal	9/27/2024	4:00 PM	9	Automated ▾	0	0.6666666681	Link To Sheet
109411	Croissant (Unsaved)	Guild ▾	Normal	9/27/2024	5:00 PM	10	Automated ▾	0	0.7083333348	Link To Sheet
109415	Jam (Unsaved)	Guild ▾	Normal	9/27/2024	6:00 PM	4	Automated ▾	0	0.7500000015	Link To Sheet
109407	Taco (Unsaved)	Guild ▾	Normal	9/27/2024	7:00 PM	10	Automated ▾	0	0.7916666681	Link To Sheet
209405	Sandwich (Saved)	Guild ▾	Heroic	9/27/2024	7:00 PM	5	Automated ▾	0	0.7916666682	Link To Sheet
109412	Eggroll (Unsaved)	Guild ▾	Normal	9/28/2024	5:00 PM	10	Automated ▾	10	0.7083333348	Link To Sheet

Automated
Upcoming
Inviting Boosters
Inviting Buyers
On Time
Late
Cancelled
In Progress
Completed
Automated

- Department-level dataset displaying event timing and availability data during scheduling
- Designed to ensure consistent event ordering in high-volume scenarios with overlapping start times
- Status field supports both manual overrides and automated updates based on proximity to event time



Fully Automated Calendar

The Collective Raid Sheet (All Times are PST)						
September 2024						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10	11	12	13	14
					(N) Tuna Mayo (Saved) Cancelled - -	(N) Tuna Mayo (Saved) 4:00 PM 0 0 (N) French Fry (Saved) Cancelled - -
15	16	17	18	19	20	21
(N) Ecoroll (Saved) 5:00 PM 0 0 (N) Pancake (Saved) 6:00 PM 0 0	(N) Tuna Mayo (Saved) Cancelled - - (N) Donut (Saved) 5:00 PM 0 0 (H) Zucchini (Saved) 5:00 PM 0 0			(H) Waffles (7/8H) Saved 4:00 PM 0 0	(N) In House (Unsaved) 6:00 PM 0 0	(H) French Fry (8/8H) Saved 6:00 PM 0 0 (N) In House (Saved) Cancelled - -
22	23	24	25	26	27	28
(N) Twinkies (Unsaved) 4:00 PM 0 0 (H) Zucchini (Saved) Cancelled - - (N) Pancake (Unsaved) 6:00 PM 0 0	(H) Soup (Saved) 5:00 PM 0 0 (N) In House (Unsaved) 5:00 PM 0 0	(H) Donut (Unsaved) 5:00 PM 0 0 (N) Gumbo (Unsaved) Cancelled - - (N) Chili (Unsaved) 9:30 PM 0 0	(N) Peanuts (Unsaved) 8:00 PM 0 0	(H) Waffles (7/8H) Saved 4:00 PM 0 0 (N) In House (Unsaved) 5:00 PM 0 0	(N) Tuna Mayo (Unsave 4:00 PM 0 0 (N) Croissant (Unsaved) 5:00 PM 0 0 (N) Jam (Unsaved) 6:00 PM 0 0 (N) Taco (Unsaved) 7:00 PM 0 0 (H) Sandwich (Saved) 7:00 PM 0 0	(N) Ecoroll (Unsaved) 5:00 PM 10 0 (N) French Fry (Unsave Cancelled - - (H) Ecoroll (7/8H) Saved 6:30 PM 7 0 (N) Omelette (Unsaved) 8:00 PM 5 0
29	30					
(N) Twinkies (Unsaved) 4:00 PM 6 0 (N) Meatball (Unsaved) 6:00 PM 10 0 (H) Pancake (Saved) 6:00 PM 3 0 (N) Corn Dog (Unsaved) 7:00 PM 10 0	(N) Zucchini (Unsaved) 5:00 PM 8 0 (N) Pizza (Unsaved) 7:00 PM 6 0 (N) Ramen (Unsaved) 8:00 PM 9 0					

- Aggregated monthly view of all scheduled events
- Primary analytical output of system-wide data structure for the Raid Department
- Supports data-driven pricing adjustments based on demand and availability





**List of All Raids
on September 28, 2024**

[\(N\) Eggroll \(Unsaved\) @5:00 PM PST](#)
[\(N\) French Fry \(Unsaved\) @Cancelled PST](#)
[\(H\) Eggroll \(7/8H Saved\) @6:30 PM PST](#)
[\(N\) Omelette \(Unsaved\) @8:00 PM PST](#)

- Event pages are generated from a template and auto-populate when staff enter the Raid ID
- Displays finalized event details, reservations, and remaining available space
- Includes workflow tools such as group assignment checkboxes and quick navigation links