



Decision Support System: Pricing and Availability Analysis

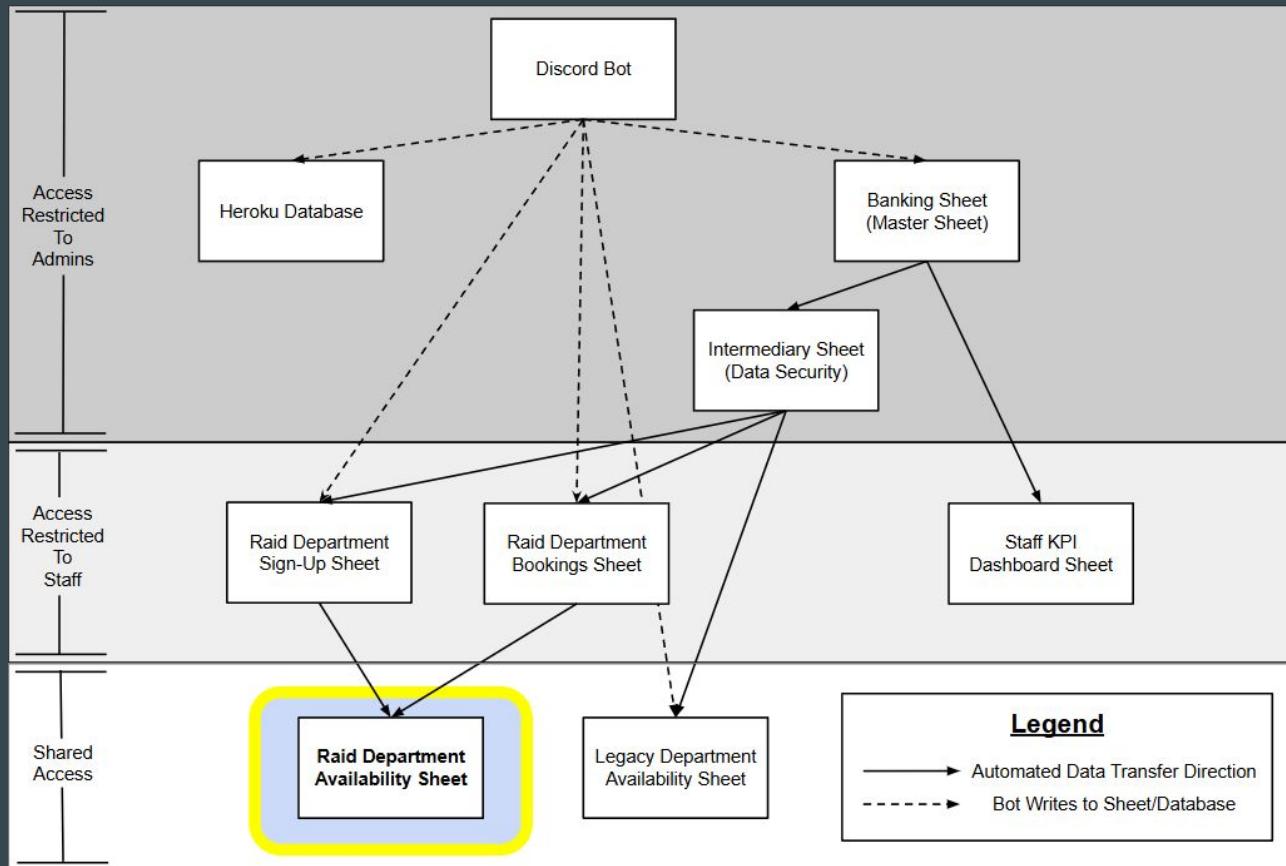
• • •

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	Automated
109304	Pancake (Unsaved)	Guild	Normal	9/22/2024	6:00 PM	8	Automated	0	0.7500000014	Link To Sheet	Upcoming
209303	Soup (Saved)	Guild	Heroic	9/23/2024	5:00 PM	5	Automated	0	0.7083333347	Link To Sheet	Inviting Boosters
109305	In House (Unsaved)	In House	Normal	9/23/2024	5:00 PM	5	Automated	0	0.7083333347	Link To Sheet	Inviting Buyers
209402	Donut (Unsaved)	Guild	Heroic	9/24/2024	5:00 PM	4	Automated	0	0.7083333347	Link To Sheet	On Time
109403	Gumbo (Unsaved)	Guild	Normal	9/24/2024	6:30 PM	10	Cancelled	10	0.7708333347	Link To Sheet	Late
109409	Chili (Unsaved)	Guild	Normal	9/24/2024	9:30 PM	10	Automated	0	0.8958333347	Link To Sheet	Cancelled
109401	Peanuts (Unsaved)	Guild	Normal	9/25/2024	8:00 PM	8	Automated	0	0.8333333348	Link To Sheet	In Progress
209401	Waffles (7/8H Saved)	Guild	Heroic	9/26/2024	4:00 PM	8	Automated	0	0.6666666681	Link To Sheet	Completed
109416	In House (Unsaved)	In House	Normal	9/26/2024	5:00 PM	10	Automated	0	0.7083333348	Link To Sheet	Automated
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	

- 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	(N) Tuna Mayo (Saved) Cancelled - -	13 (N) Tuna Mayo (Saved) 4:00 PM 0 0 (N) French Fry (Saved) Cancelled - -
						14
15	16	17	18	19	(H) Waffles (7/8H Saved) 4:00 PM 0 0 (N) In House (Unsaved) 6:00 PM 0 0	20 (H) French Fry (6/8H Sd) 6:00 PM 0 0 (N) In House (Saved) Cancelled - -
(N) Eggroll (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	(N) Donut (Saved) 5:00 PM 0 0	(H) Waffles (7/8H Saved) 4:00 PM 0 0 (N) Gumbo (Unsaved) Cancelled - -	(N) In House (Unsaved) 6:00 PM 0 0	(H) French Fry (6/8H Sd) 6:00 PM 0 0 (N) In House (Saved) Cancelled - -	21
22	23	24	25	26	(H) Waffles (7/8H Saved) 4:00 PM 0 0 (N) In House (Unsaved) 5:00 PM 0 0	27 (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 (H) Eggroll (7/8H Saved) 6:30 PM 7 0 (N) Taco (Unsaved) 7:00 PM 0 0 (H) Sandwich (Saved) 7:00 PM 0 0
(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) Peanut (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) Eggroll (Unsaved) 5:00 PM 10 0 (N) French Fry (Unsave) Cancelled - - (N) Jam (Unsaved) 6:00 PM 0 0 (H) Eggroll (7/8H Saved) 6:30 PM 7 0 (N) Omelette (Unsaved) 8:00 PM 5 0	28
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
- Events contain hyperlinks to associated pages





Associated Event Page

- 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

