

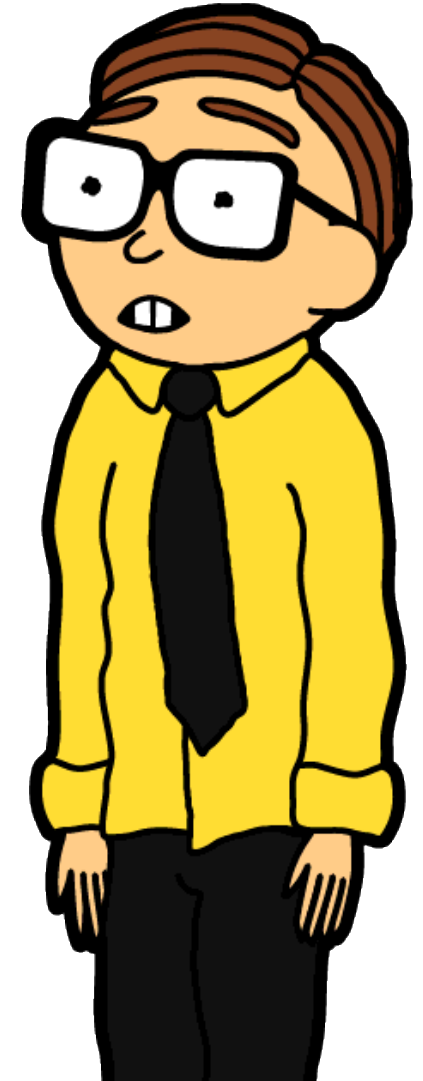


KYAC Data Solutions

Terms and Definitions

Teams & Tools

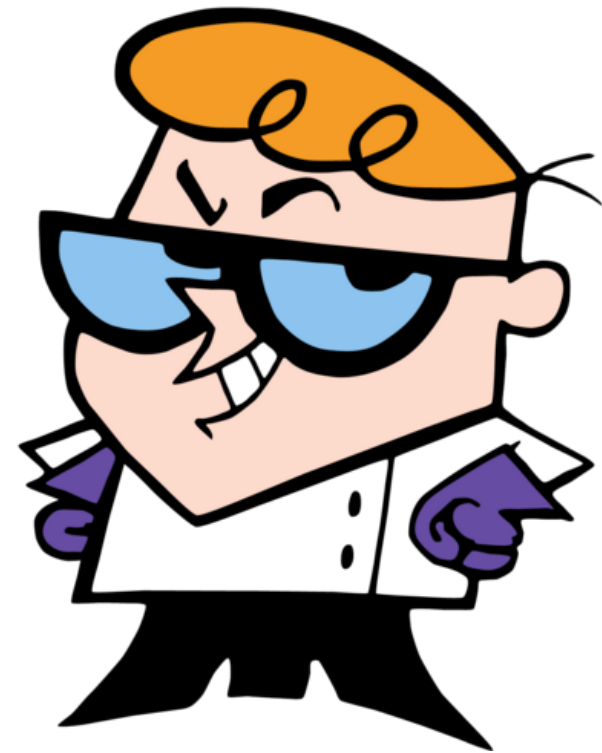
- WB Analytics: The team headed by Matt Howell over in SF/Boston.
- In-House Solution: Data is fed into an S3 bucket we own and manage. The data either comes directly from the games databases, we use something like Unity Analytics or even Segment if the benefit there is worth the cost.
- ETL: Export, Transpose, Load (the process by which we get data from the S3 buckets into Snowflake)
- UA Tool: This is the way we track players we acquire via User Acquisition campaigns. Examples are Kochava, Singular, & Gamesite
- Hydra: Is a development toolset that provides everything you need to build and maintain live games across every platform. It powers online features, keeping players engaged in your game and community. (outside the realm of this deck as analytics is only a small portion and can be extricated successfully)



Terms and Definitions

Roles

- Database Administrator (DBA)/Data developer role: Responsible for API pulls, Creating and automating ETLs, Databases, Schemas, and tables, and any other database level work that is required.
- Sr/Lead Analyst: Works on predictive data models (preferably in Python or R, but flexible on technology), able to provide complex ad-hoc reporting, highly proficient with SQL and ideally has experience with Looker or some other data visualization tool. Main source of complex business insights.
- Reporting Analyst: Produces reporting in Looker, is proficient enough in SQL to be able to do reporting in SQL before putting it into Looker.



What are our options?



Option 1: WB Analytics - They Take it All

What does that look like

WBA is integrated into ALL games. We perform analytics on our side to support game production but rely heavily on WBA for the backend and analysis. Not able to move games into tail phase without losing ability to do data analysis.

Best Guess at staffing

2 Total

- 1 Sr/Lead Analyst
- 1 Reporting Analyst

Marketing

Would be handled completely by WB in SF



Option 2: In-House - We Take it All, No WB

What does that look like

We basically create our own WBA light. In so doing, we will need a full team to provide development and maintenance of the databases, full reporting and insights and marketing. Segment to a very real extent would fall into this bucket if it were used.

Best Guess at Staffing

5-6 Total

- 1 – 1.5 Data Developer/DBA to sit with MSS
- 2-3 Sr/Lead Analysts (highly technical)
- 2-3 Reporting Analysts

Marketing

Would necessitate a robust solution not currently in place, best solution would likely be an inhouse game marketing team, best guess is 3-5 people minimum plus an art team.



Option 3: Blended Solution – WB + In-House

What does that look like

WBA would be used for games that require highly targeted digital marketing, all others would be done in house. Once a game in WBA is put into tail mode, data will be move over into our S3/Snowflake/Looker model to allow for continued data insights.

Best Guess at Staffing

3-4 Total

- 1 to 0.5 Data Developer/DBA to sit with MSS
- 1-2 Sr/Lead Analysts
- 1-2 Reporting Analysts

Marketing

Big Digital marketing pushes would be handled by WB in SF. Smaller, not as targeted campaigns would be handled by TMG or an Agency of our choosing.



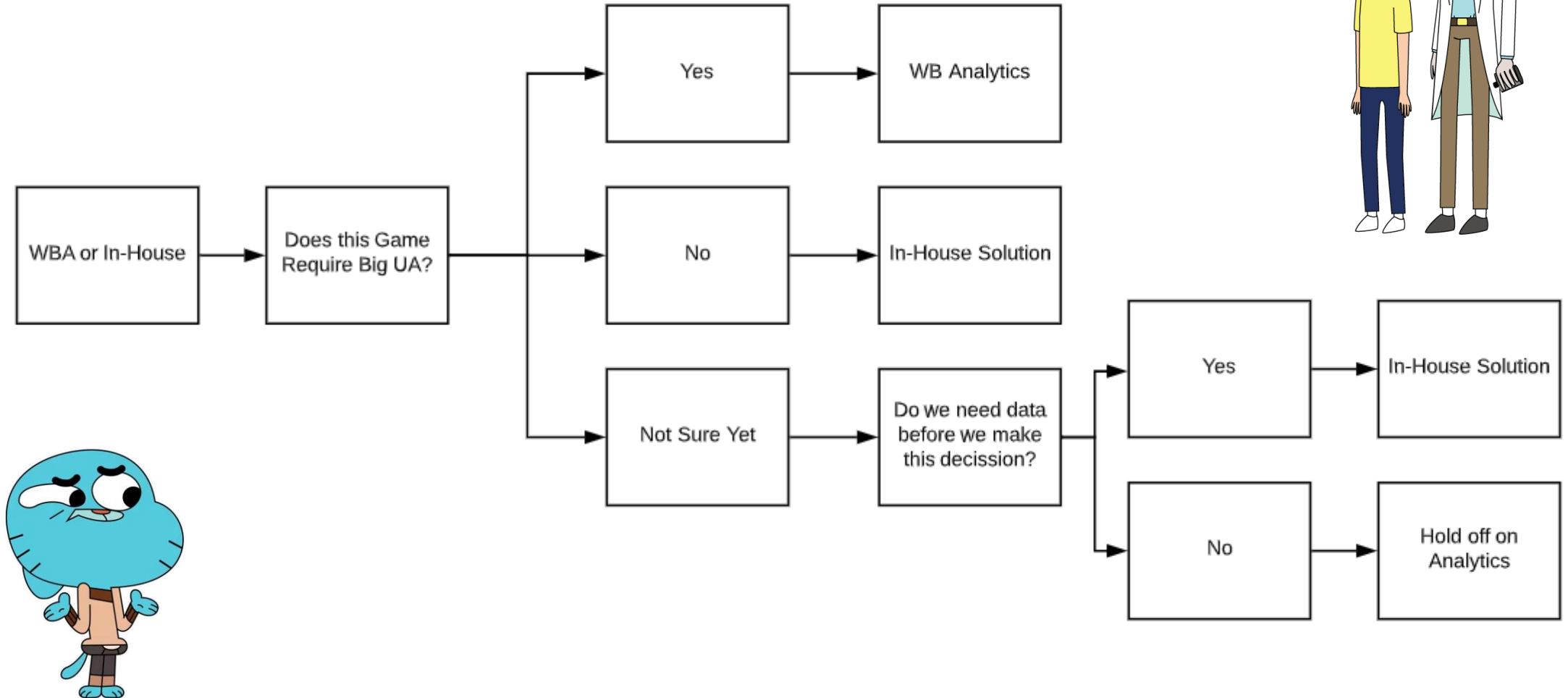
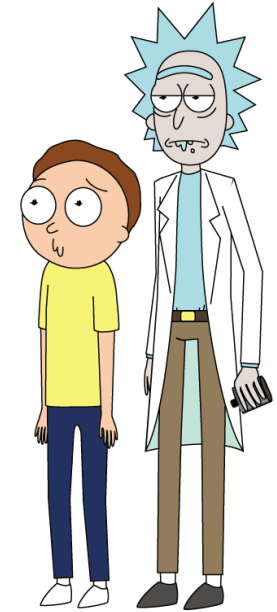
Recommendation?

Blended Solution

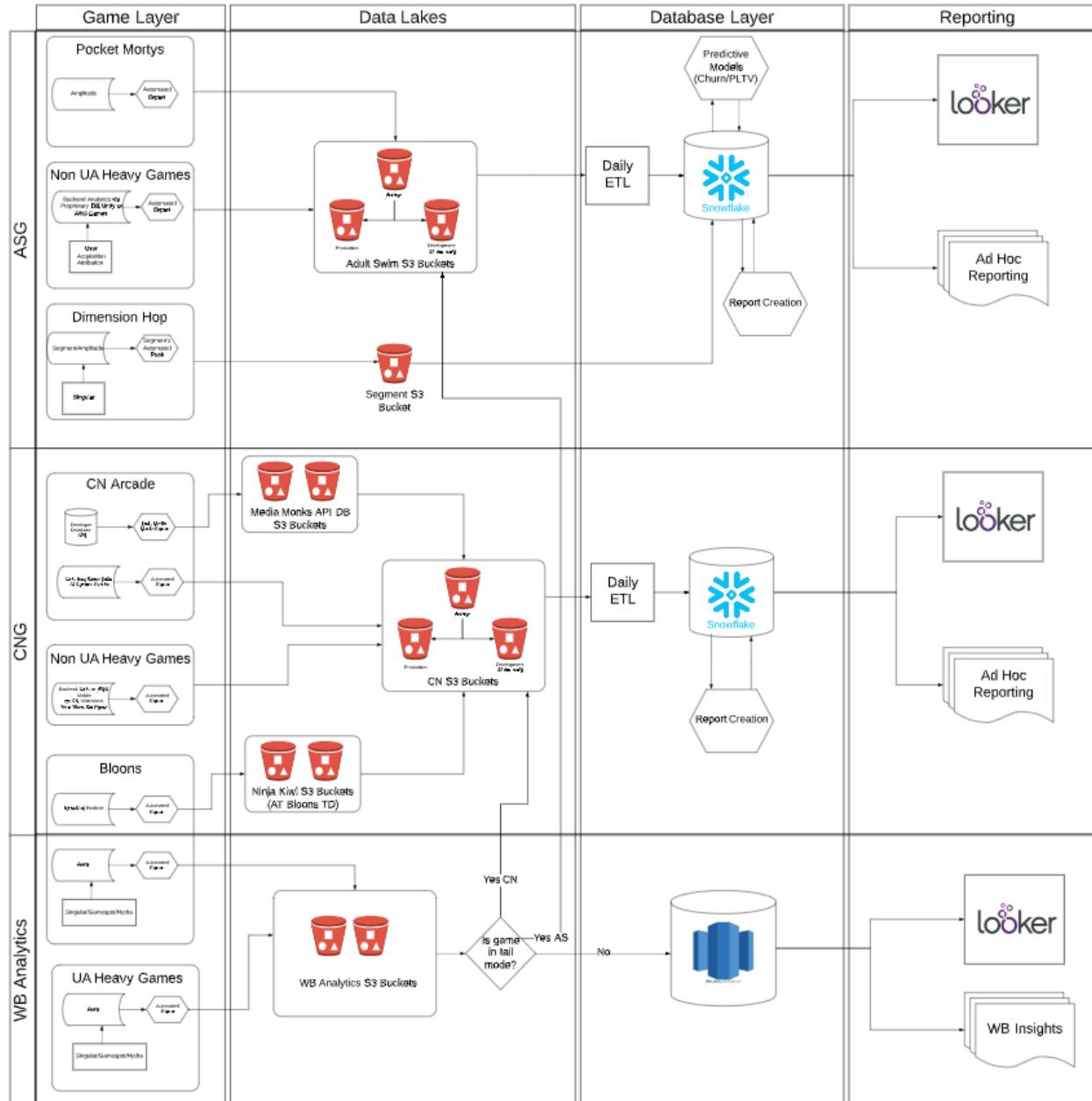
Provides the most flexible and affordable solution



Decision Tree – Blended Solution



Blended Solution - Data Stack



Game Layer: This is where the data is collected and how. Examples include WB Analytics, Amazon Games, Unity and Segment. User Attribution is part of this layer.

Data Lakes: Here is where raw data, in JSON or CSV format is dropped by the games or APIs on a daily basis. (We can also use different formats if necessary)

Database Layer: The ETL runs daily and takes the raw data files and transforms them into tables that can be queried, mined and manipulated to provide reporting.

Reporting: Data is visualized for consumption in two ways, the first is a series of self serve dashboards that lives in Looker. This allows product managers and executive to monitor the game in real time. The second is adhoc reporting performed by analysts to answer more complicated questions, such as predictive analytics and user journeys.

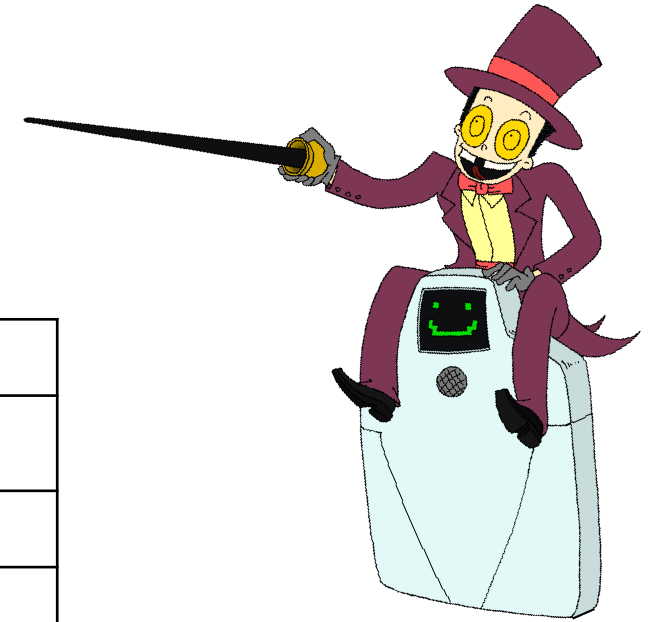


WB Analytics Costs Overview – Mobile/Console

(Not including UA Tool)

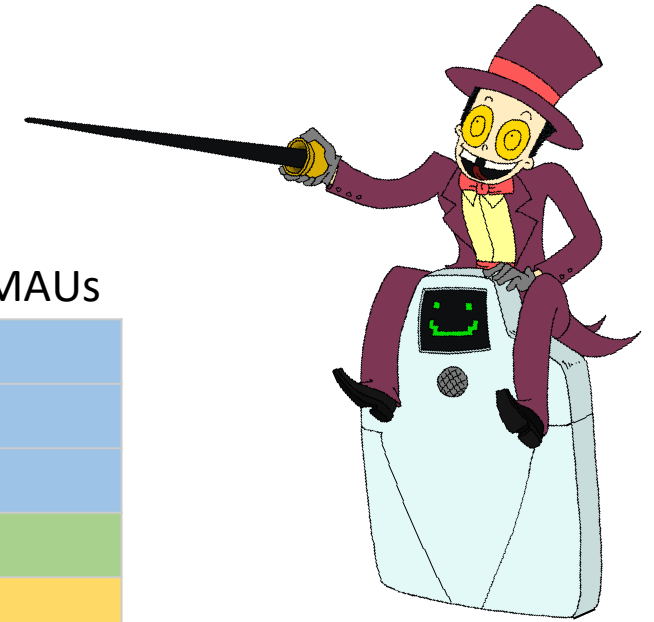
WBA Monthly Fee Structure

Estimated Costs for a Console Title					
MAU	Concept	Development	Live	Maintenance	Tail
<= 400K	\$3,800	\$6,000	\$18,000	\$8,500	\$0
500K - 750K	\$3,800	\$6,000	\$35,000	\$17,500	\$0
750K - 1,000K	\$3,800	\$6,000	\$45,000	\$21,500	\$0



WB Analytics Costs By MAU - Detailed

(Not including UA Tool)



WBA Monthly Fee Structure

Estimated Costs for a Console Title with 200-400K MAU					
Phase	Concept	Development	Live	Maintenance	Tail
WBA License Fee	\$3,800	\$4,000	\$10,000	\$3,500	\$0
WBA Hosting	\$0	\$1,000	\$3,000	\$2,000	\$0
WBA Shared Services	\$0	\$1,000	\$5,000	\$3,000	\$0
Total	\$3,800	\$6,000	\$18,000	\$8,500	\$0

Estimated Costs for a Console Title With 500-750K MAU					
Phase	Concept	Development	Live	Maintenance	Tail
WBA License Fee	\$3,800	\$4,000	\$10,000	\$3,500	\$0
WBA Hosting	\$0	\$1,000	\$8,000	\$4,000	\$0
WBA Shared Services	\$0	\$1,000	\$17,000	\$10,000	\$0
Total	\$3,800	\$6,000	\$35,000	\$17,500	\$0

Predicted Upcoming Game MAUs

ASG- Grandpa	150,000
ASG - Mobile Game 3	393,745
CN - Arcade Reboot	375,000
ASG - Mantis	587,824
ASG - McNuggets	1,000,000

Estimated Costs for a Console Title With 750-1,000 K MAU					
Phase	Concept	Development	Live	Maintenance	Tail
WBA License Fee	\$3,800	\$4,000	\$10,000	\$3,500	\$0
WBA Hosting	\$0	\$1,000	\$10,000	\$6,000	\$0
WBA Shared Services	\$0	\$1,000	\$20,000	\$12,000	\$0
Total	\$3,800	\$6,000	\$45,000	\$21,500	\$0

WB Analytics Costs – Examples

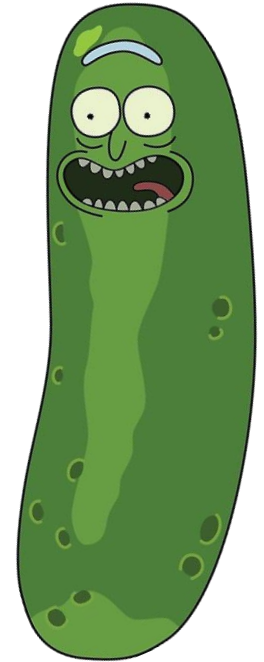
(Not including UA Tool)

There are many scenarios for final pricing at the different tiers, here are some likely ones as examples

1st Year - Set Up													
MAU	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Year Total
<= 400K	\$ 3,800	\$ 3,800	\$ 3,800	\$ 6,000	\$ 6,000	\$ 6,000	\$ 18,000	\$ 18,000	\$ 8,500	\$ 8,500	\$ 8,500	\$ 8,500	\$ 99,400
500K - 750K	\$ 3,800	\$ 3,800	\$ 3,800	\$ 6,000	\$ 6,000	\$ 6,000	\$ 35,000	\$ 35,000	\$ 17,500	\$ 17,500	\$ 17,500	\$ 17,500	\$ 169,400
750K - 1,000K	\$ 3,800	\$ 3,800	\$ 3,800	\$ 6,000	\$ 6,000	\$ 6,000	\$ 45,000	\$ 45,000	\$ 21,500	\$ 21,500	\$ 21,500	\$ 21,500	\$ 205,400
Subsequent Years - Full Support													
MAU	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Year Total
<= 400K	\$ 8,500	\$ 8,500	\$ 8,500	\$ 8,500	\$ 8,500	\$ 8,500	\$ 8,500	\$ 8,500	\$ 8,500	\$ 8,500	\$ 8,500	\$ 8,500	\$ 102,000
500K - 750K	\$ 17,500	\$ 17,500	\$ 17,500	\$ 17,500	\$ 17,500	\$ 17,500	\$ 17,500	\$ 17,500	\$ 17,500	\$ 17,500	\$ 17,500	\$ 17,500	\$ 210,000
750K - 1,000K	\$ 21,500	\$ 21,500	\$ 21,500	\$ 21,500	\$ 21,500	\$ 21,500	\$ 21,500	\$ 21,500	\$ 21,500	\$ 21,500	\$ 21,500	\$ 21,500	\$ 258,000
Subsequent Years - Wind-Down													
MAU	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Year Total
<= 400K	\$ 8,500	\$ 8,500	\$ 8,500	\$ 8,500	\$ 8,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 42,500
500K - 750K	\$ 17,500	\$ 17,500	\$ 17,500	\$ 17,500	\$ 17,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 87,500
750K - 1,000K	\$ 21,500	\$ 21,500	\$ 21,500	\$ 21,500	\$ 21,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 107,500
Subsequent Years - Tail Phase													
MAU	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Year Total
<= 400K	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
500K - 750K	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
750K - 1,000K	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Projected WB Costs Grandpa & Bloons

Grandpa			Bloons		
Date	Phase	Cost	Date	Phase	Cost
May 2020	Concept	\$3,800.00	April 2020	Development	\$6,000.00
June 2020	Concept	\$3,800.00	May 2020	Development	\$6,000.00
July 2020	Concept	\$3,800.00	June 2020	Live	\$18,000.00
August 2020	Concept	\$3,800.00	July 2020	Live	\$18,000.00
September 2020	Development	\$6,000.00	August 2020	Live	\$18,000.00
October 2020	Development	\$6,000.00	September 2020	Live	\$18,000.00
November 2020	Development	\$6,000.00	October 2020	Live	\$18,000.00
December 2020	Development	\$6,000.00	November 2020	Live	\$18,000.00
January 2021	Live	\$18,000.00	December 2020	Tail	\$0.00
February 2021	Live	\$18,000.00	January 2021	Tail	\$0.00
March 2021	Live	\$18,000.00	January 2021	Tail	\$0.00
April 2021	Live	\$18,000.00	January 2021	Tail	\$0.00
Total 1st Year Cost		\$93,200.00	Total 1st Year Cost		\$120,000.00



In House Data Costs*

Current cost of ASG Snowflake was much higher than it should be. We are actively fixing this and last month got it on par with Cartoon Network. Expect it to be between \$1,000 - \$2,000 once up and running.

Snowflake Monthly (Average last 6 months)


Cartoon Network: \$605.08

Adult Swim Games: \$6,698.35

Looker

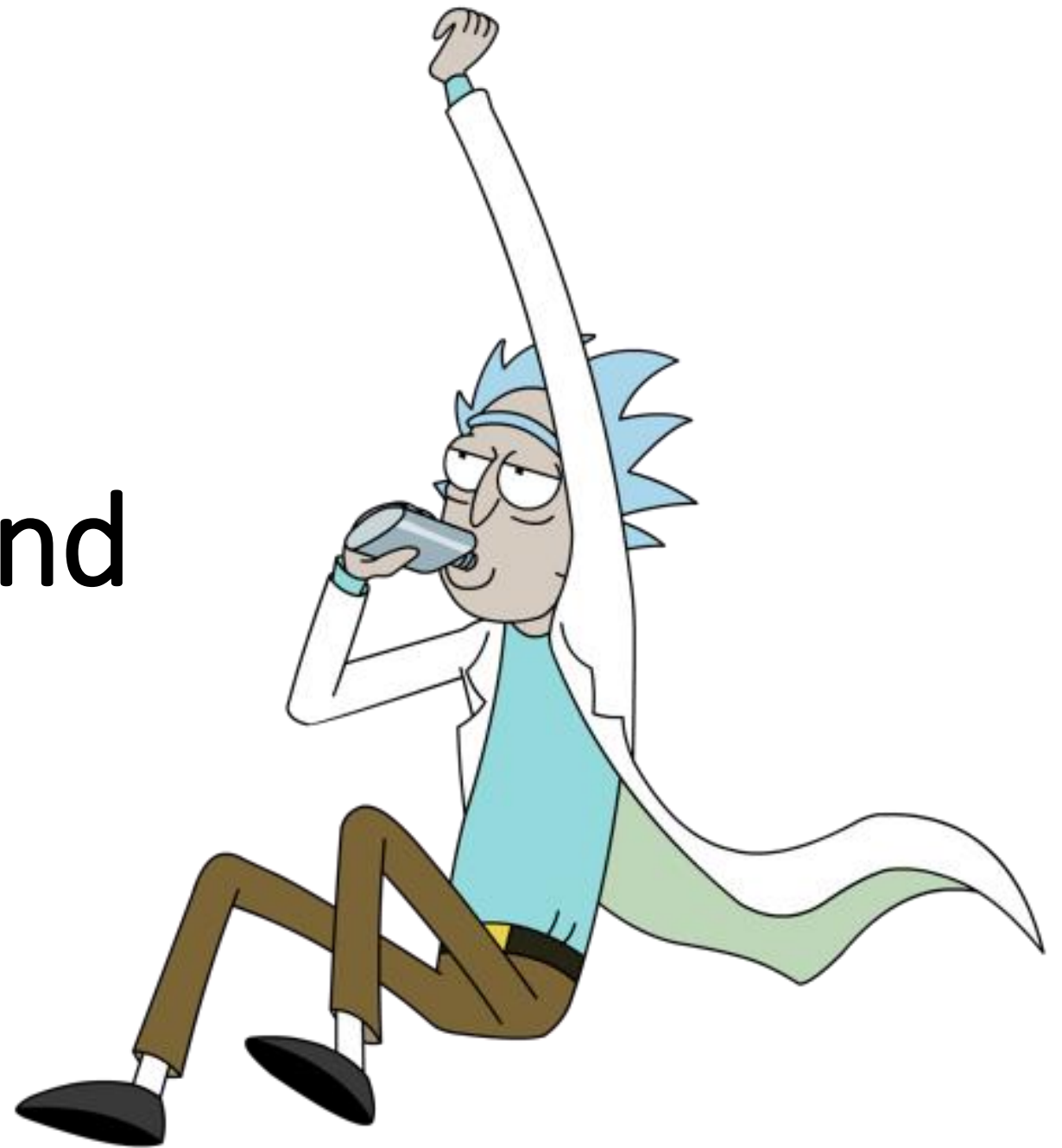
There is not yet pricing for Looker at WarnerMedia, nor is there a timeframe for this.



A cartoon illustration of Rick Sanchez from the animated series 'Rick and Morty'. He is shown from the back, wearing his signature white lab coat and having his characteristic spiky blue hair. He stands in a studio-like setting with various musical instruments, including a keyboard on a stand to his left, a smaller keyboard on a stand in front of him, a microphone on a stand to his right, and a red electric guitar leaning against a stand on the far right. The background is a bright yellow-orange gradient, and it is populated with numerous floating, stylized faces of various colors (blue, red, green, purple, brown) and expressions. A large, central face with a wide-open mouth, as if shouting or singing, is the most prominent. The word 'Questions?' is written in a large, black, sans-serif font across the middle of the image, centered over Rick's head and the floating faces.

Questions?

The End



Resources – Further Reading

- Pricing Google Sheet w/More Details: [Here](#)
- Data Model: [Here](#)

