

*GOIT
Data Analyst*

FINAL PROJECT

REVENUE METRICS

Presented by: Iryna Maidanchuk





GOALS

Create a dashboard for analyzing cash flow on the project.

With its help, (imaginary) product managers will track the dynamics of changes in cash flow and make a top-level analysis of the factors behind these changes.

A dashboard should include the next metrics:

The number of paying users. The number of users who started paying in the corresponding period of time.

The ratio of Churned Users in the target period to Paid Users in the previous period. The ratio of revenue for the previous month from those users who did not continue to pay to the revenue for a certain calendar month

The average amount of time from the first payment to the user's dropout. The average total amount that one user pays for the entire time of using the product.

**MRR, NEW MRR,
APPRU**

**Paid users, New
paid users**

**Churned users,
Churned Revenue**

**Churned Rate,
Revenue churned rate**

**Expansion MRR,
Contraction MRR**

**Customer LIFE TIME,
Life Time Value**

The amount of revenue for a calendar month. MRR generated by users who became paying users in the corresponding month. the average revenue per paying user. The average revenue per paying user.

The number of users who stopped paying in the corresponding period. The total revenue for the previous period from all users who stopped paying.

The amount by which MRR increased from one month to the next. The amount by which MRR decreased from one month to the next.

TOOL STACK

**Postgre
SQL**

For making request

Tableau

For visualizing

Canva

For presenting

Slack

For communication

Trello

For planning

**LMS
Platform**

For studying



PostgreSQL

The screenshot shows the DBeaver 23.2.0 interface. The top navigation bar includes File, Edit, Navigate, Search, SQL Editor, Database, Window, and Help. The SQL Editor tab is selected, displaying a complex PostgreSQL query with four Common Table Expressions (CTEs). The query calculates monthly revenue, previous month's revenue, and various churn metrics. Below the editor is a results grid titled "games_payments(+)" showing data for 200 rows. The columns include user_id, game_r, age, year_month, paid_l, mrr, arppu, new_mrr, churn, and several churn-related metrics. The bottom status bar indicates "200 row(s) fetched - 146ms (1ms fetch), on 2024-01-19 at 12:48:27". On the left, there is a sidebar with a "Project - G..." section containing Bookmarks, Diagrams, and Scripts.

```
WITH monthly_data AS (
    SELECT
        DATE_TRUNC('month', gp.payment_date) AS year_month,
        gp.user_id,
        gp.game_name,
        SUM(gp.revenue_amount_usd) AS total_revenue
    FROM
        project.games_payments gp
    GROUP BY
        year_month,
        user_id,
        game_name
),
prev_next_month_data AS (
    SELECT
        md.year_month,
        md.user_id,
        md.game_name,
        md.total_revenue,
        LAG(md.total_revenue) OVER (PARTITION BY md.user_id ORDER BY md.year_month) AS prev_month_revenue,
        (md.year_month - interval '1' month) as previous_calendar_month,
        md.churn
    FROM
        monthly_data md
)
```

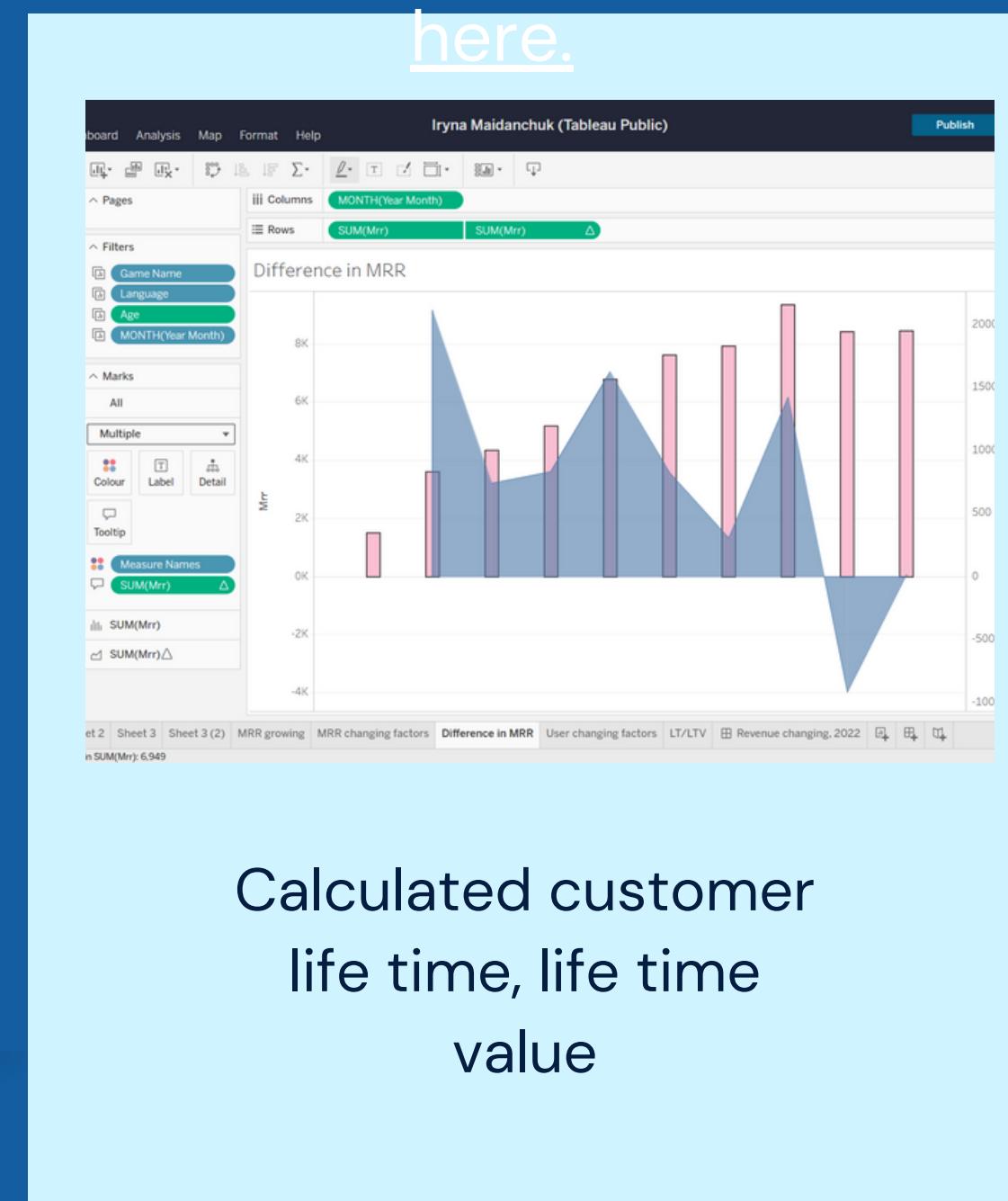
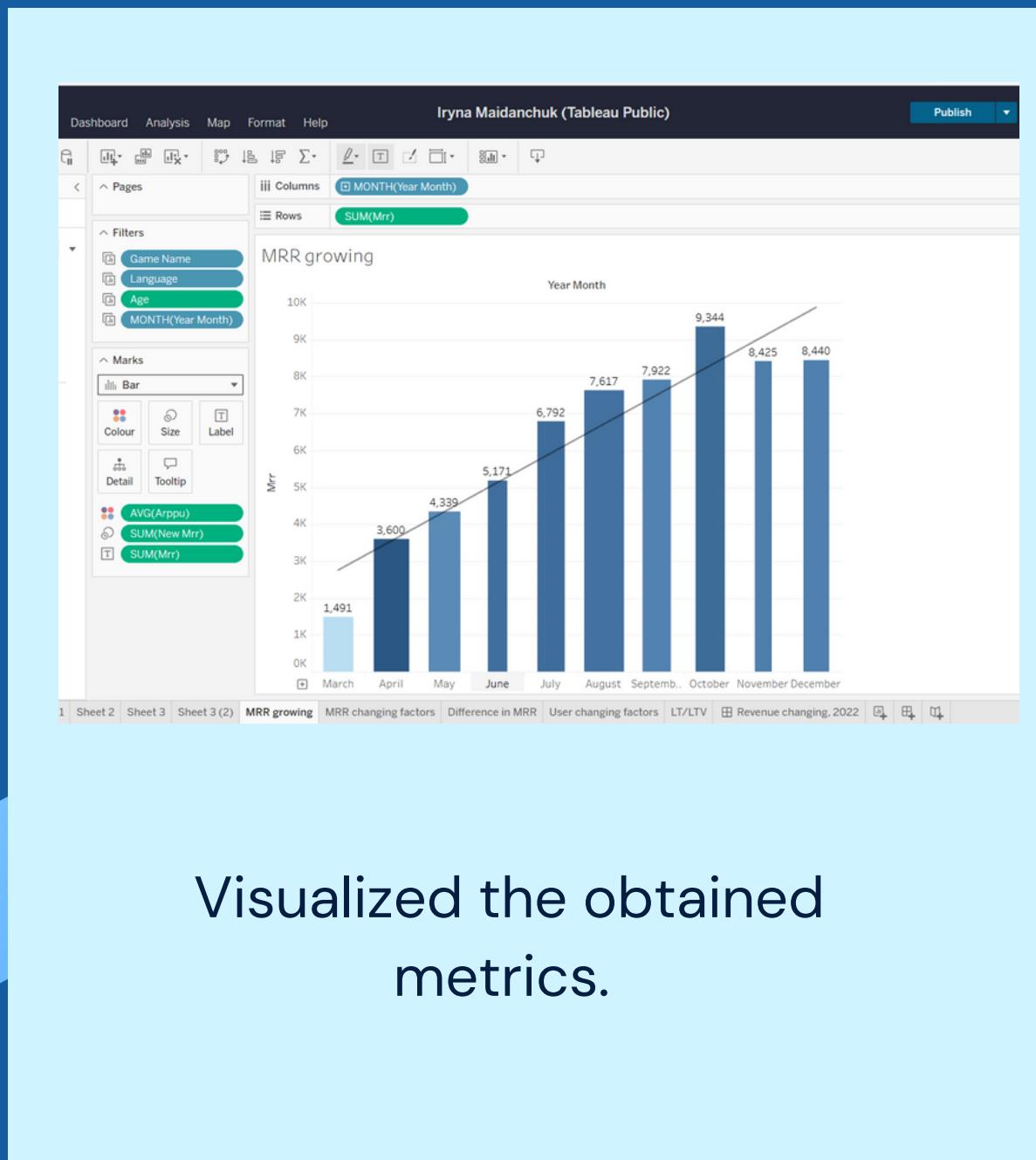
Grid	user_id	game_r	age	year_month	paid_l	mrr	arppu	new_mrr	churn	churn	churn	churn	reve	exp	contr
13	b3TBQFxyCxxypmPajF+jXw==	game 3	uk	15 2022-03-01 00:00:00.000 +0000	1	13.98	13.98	13.98	0	0	0	0	0	0	0
14	B4b6v6eUhvAVoAqk6EEiw==	game 3	ru	23 2022-03-01 00:00:00.000 +0000	1	15.3	15.3	15.3	0	0	0	0	0	0	0
15	Bcs3CbYx2EpbL9otxlEUmg==	game 3	uk	18 2022-03-01 00:00:00.000 +0000	1	89.22	89.22	89.22	0	0	0	0	0	0	0
16	CCwTMcGtpirFFuzzSeTyaQ==	game 3	uk	18 2022-03-01 00:00:00.000 +0000	1	15.84	15.84	15.84	0	0	0	0	0	0	0
17	Fx9+2aYPOHAS3fdXpLQ9Pg==	game 3	ru	35 2022-03-01 00:00:00.000 +0000	1	12.54	12.54	12.54	0	0	0	0	0	0	0
18	Ghk2iUmzSUW4qlSmJgwOcw==	game 3	uk	16 2022-03-01 00:00:00.000 +0000	1	17.13	17.13	17.13	0	0	0	0	0	0	0
19	H44DjZG42orzuBXLai7JkA==	game 3	ru	29 2022-03-01 00:00:00.000 +0000	1	13.32	13.32	13.32	1	13.32	0	0	0	0	0
20	HJccOn6v5KHqBa8wRu42oQ==	game 3	uk	20 2022-03-01 00:00:00.000 +0000	1	27.6	27.6	27.6	0	0	0	0	0	0	0
21	HxWcXHURvtOkrXAcDxQg==	game 3	uk	15 2022-03-01 00:00:00.000 +0000	1	66.18	66.18	66.18	0	0	0	0	0	0	0
22	iFFApiZZ2wPds666BLpKZw==	game 3	uk	18 2022-03-01 00:00:00.000 +0000	1	26.85	26.85	26.85	0	0	0	0	0	0	0
23	J6WNi39fdxaY8ZtvV8wNkw==	game 3	uk	18 2022-03-01 00:00:00.000 +0000	1	16.14	16.14	16.14	0	0	0	0	0	0	0
24	Jp0hnV9XOJGVV5jpFhlqqQ==	game 3	uk	25 2022-03-01 00:00:00.000 +0000	1	122.64	122.64	122.64	0	0	0	0	0	0	0

- I created a database query with four CTE. I added the calculation of the required auxiliary indicators. The query can be viewed [here](#).
- Calculated most of the metrics from the terms of reference

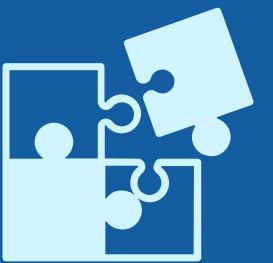
TABLEAU PUBLIC

I created an interactive dashboard with filtering, which enables a comprehensive analysis of profit. You can see the entire dashboard

[here.](#)



DIFFICULTIES AND SOLUTIONS



TECHNICS

Could not handle the final working version of the SQL query. Used the chat GPT, and contacted the mentor of project. Asked her recommendation about visualising data.



TIME MANAGEMENT

Fell ill at the end of the project. I found out all the possibilities to pass the project, chose the option of presentation in the recording, it added a few necessary days.



RESULTS

- 01** Gained skills in monitoring and analyzing project financial data
- 02** Identified the key factors that affect profitability. This makes it possible to plan measures that can be taken to increase profits
- 03** Created an auxiliary tool for strategic decisions of project managers
- 04** Increased competencies in analytics and project management by working with financial data and creating dashboards



Thank's For Watching

Contacts

+380679950334

maidanchuk.irrok@gmail.com

My CV

