



# Business Case Study ETL

**PRESENTED BY:**

Anniza Mega



 This event has live translations.

# Agenda

**Tip:** Use links to go to a different page inside your presentation.

**How:** Highlight text, click on the link symbol on the toolbar and select the page in your presentation you want to connect.

Objective

Problem Statement

IETL Process

Query, Analyzing, Insight I

Query, Analyzing, Insight II

Query, Analyzing, Insight III

Query, Analyzing, Insight IV

Recommendations

# Objectives

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## Objectives

- To extract meaningful insights from diverse datasets related to payment methods, revenue across countries, revenue performance of campaigns vs. non-campaign, and analyzing campaign effectiveness.



# Problem Statement

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01













Despite having access to various datasets, businesses often struggle to derive actionable insights to drive revenue growth and optimize marketing strategies.

02

Lack of understanding of the data and its implications hinders effective decision-making processes.

# Extract

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```
▼  public
  ▼  Tables
    >  assignment_player_bonus
    >  assignment_player_profile
    >  assignment_player_salary
    >  cs
    >  cs_address
    >  cs_campaign
    >  cs_cost
    >  cs_payment
    >  cs_profile
    >  cs_transaction
```

- Connect to the data sources (the provided PostgreSQL tables).
- Retrieve data from each table (**cs\_address, cs\_campaign, cs\_cost, sc\_payment, cs\_profile, cs\_transaction**).



# Transform

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```
--"Exploring Revenue Performance: Campaign vs. Non-Campaign"
SELECT
  'Campaign' AS source,
  campaign_name,
  SUM(revenue) AS total_revenue
FROM cs_payment cp
INNER JOIN cs_campaign cc ON cp.id = cc.id
GROUP BY source, campaign_name

UNION ALL

SELECT
  'Non Campaign' AS source,
  NULL AS campaign_name,
  COALESCE(SUM(revenue), 0) AS total_revenue
FROM cs_payment cp
LEFT JOIN cs_campaign cc ON cp.id = cc.id
WHERE cc.id IS NULL

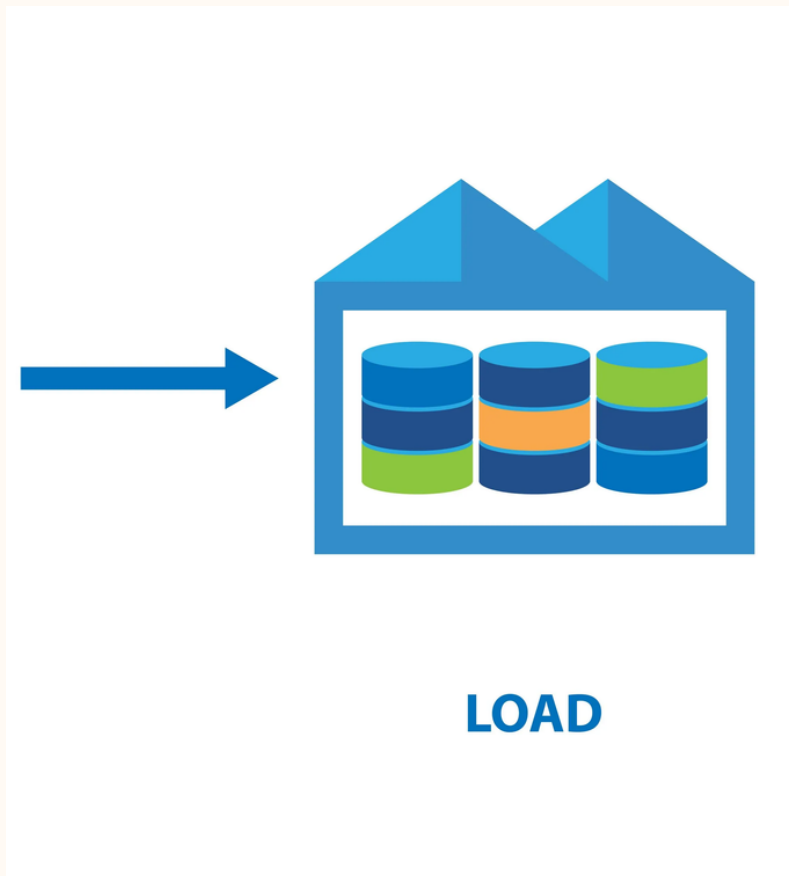
ORDER BY source, total_revenue DESC;
```

- Cleanse and preprocess the data to ensure consistency and accuracy.
- Perform data aggregation, normalization, and feature engineering to prepare the data for analysis.

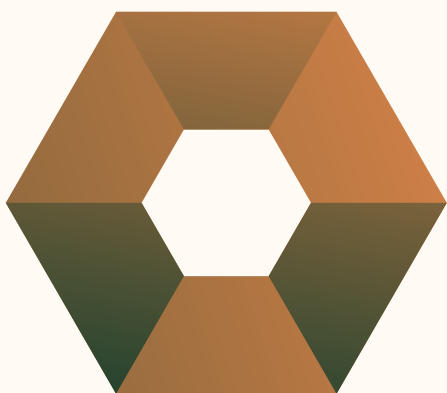


# Load

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Load the transformed data into a suitable analytical platform or database for further exploration and analysis.





Query,  
Analyzing and  
Insight





# Query Revenue Campaign vs Non Campaign Performance

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```
--"Exploring Revenue Performance: Campaign vs. Non-Campaign"
SELECT
  'Campaign' AS source,
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SELECT
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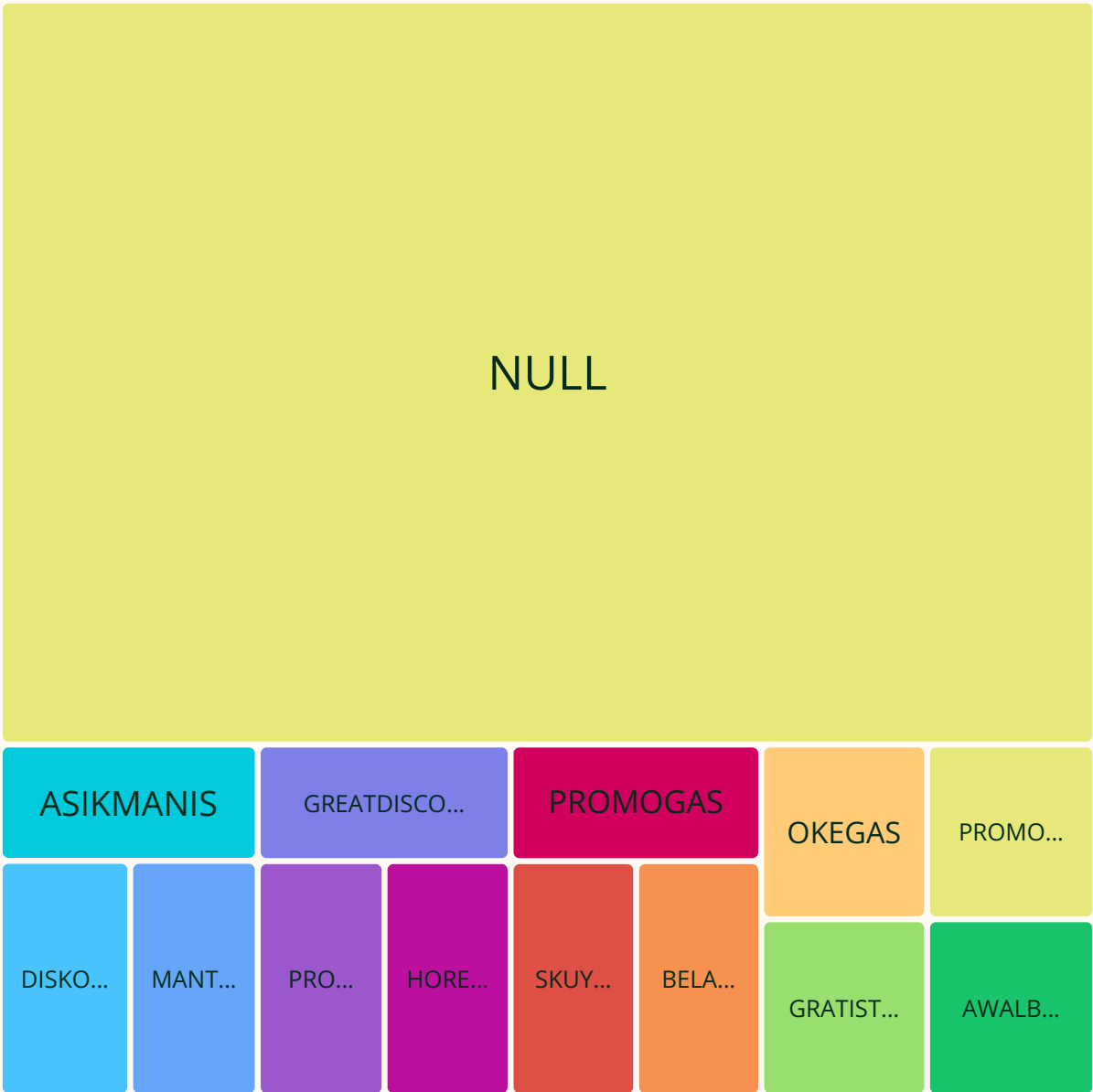
ORDER BY source, total_revenue DESC;
```

	source	campaign_name	total_revenue
1	Campaign	ASIKMANIS	449,191,995
2	Campaign	DISKONUHUY	448,550,122
3	Campaign	MANTAPGAS	448,506,391
4	Campaign	GREATDISCOUNT	446,224,997
5	Campaign	PROMOYE	445,243,467
6	Campaign	HOREDISKON	442,840,232
7	Campaign	PROMOGAS	442,625,887
8	Campaign	SKUYLAHBELANJA	440,945,620
9	Campaign	BELANJASIK	438,887,743
10	Campaign	OKEGAS	438,730,834
11	Campaign	PROMOASIK	437,219,767
12	Campaign	GRATISTISTIS	436,658,654
13	Campaign	AWALBULANCERIA	434,961,959
14	Non Campaign	[NULL]	12,225,964,739

# Revenue Campaign vs Non Campaign Performance Analysis

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In our analysis of revenue performance, we delved into the impact of different marketing campaigns compared to non-campaign sources. The chart below visualizes the total revenue generated by each campaign alongside the revenue from non-campaign sources.



# Insight of Revenue Campaign vs Non Campaign Performance

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## Campaign Revenue Dynamics

- The chart vividly illustrates the varying degrees of success across different campaigns.
- "ASIKMANIS" emerges as the top performer, closely followed by "DISKONUHUY" and "MANTAPGAS," indicating the effectiveness of these campaigns in driving revenue.

## Non-Campaign Revenue Contribution

- While campaigns play a significant role, it's crucial not to overlook the substantial revenue generated from non-campaign sources.
- Non-campaign revenue notably surpasses individual campaign revenues, underlining the importance of diversification in revenue streams.

## Opportunities and Challenges

- Understanding the revenue dynamics of each campaign presents opportunities for optimization and resource allocation.
- Moreover, exploring the substantial non-campaign revenue highlights potential areas for further exploration and investment.

# Query Campaign Effectiveness

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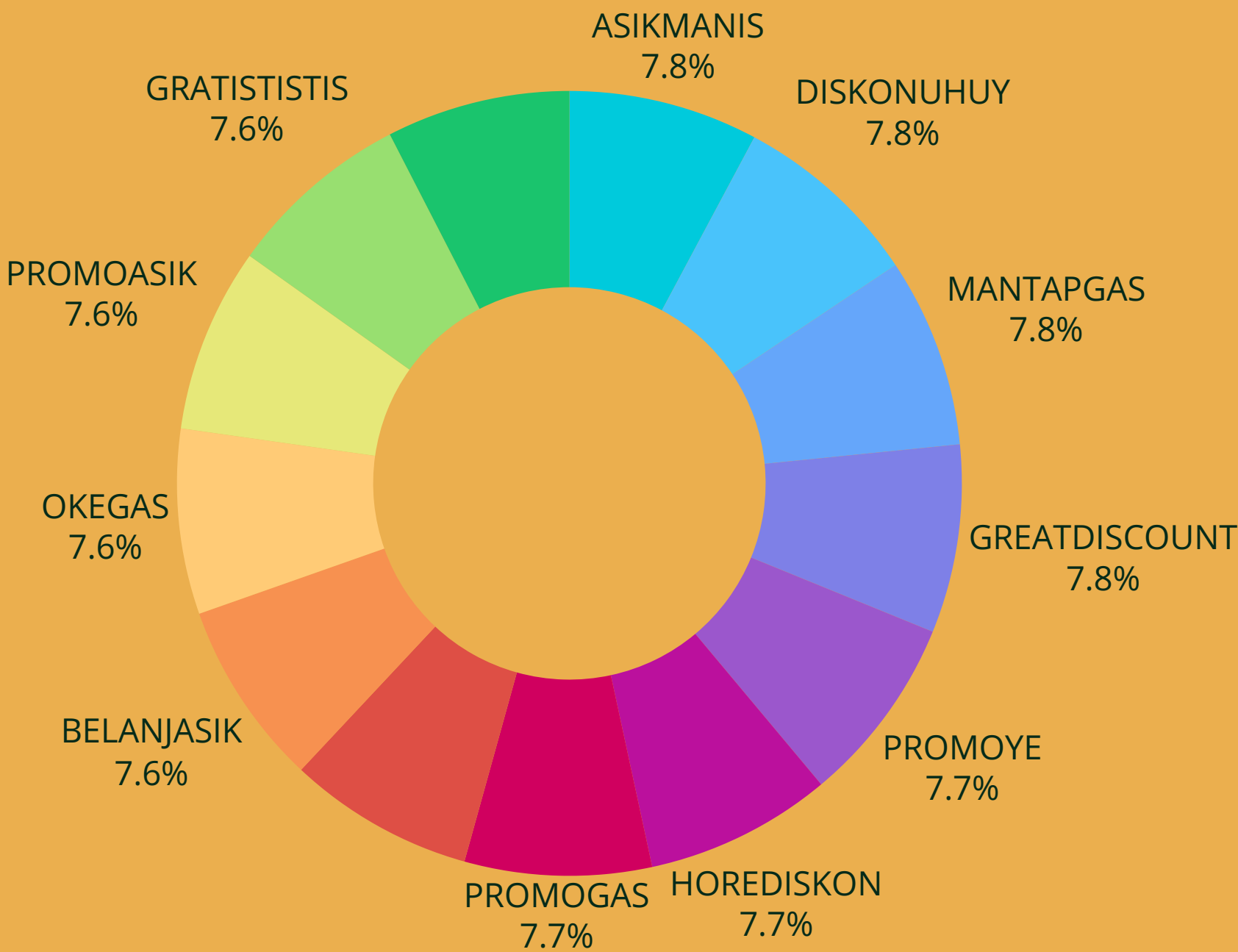
```
SELECT
  campaign_name,
  SUM(revenue) AS total_revenue_campaign,
  (SUM(revenue) / SUM(SUM(revenue)) OVER ()) * 100 AS percentage_of_total
FROM cs_payment cp
INNER JOIN cs_campaign cc ON cp.id = cc.id
GROUP BY campaign_name
ORDER BY total_revenue_campaign DESC;
```

	ABC campaign_name	123 total_revenue_campaign	123 percentage_of_total
1	ASIKMANIS	449,191,995	7.8112363628
2	DISKONUHUY	448,550,122	7.8000744949
3	MANTAPGAS	448,506,391	7.7993140335
4	GREATDISCOUNT	446,224,997	7.7596416708
5	PROMOYE	445,243,467	7.7425733282
6	HOREDISKON	442,840,232	7.7007822081
7	PROMOGAS	442,625,887	7.6970548499
8	SKUYLAHBELANJA	440,945,620	7.6678358014
9	BELANJASIK	438,887,743	7.6320502936
10	OKEGAS	438,730,834	7.6293217203
11	PROMOASIK	437,219,767	7.6030449798
12	GRATISTISTIS	436,658,654	7.5932874901
13	AWALBULANCERIA	434,961,959	7.5637827664

# Analyzing Campaign Effectiveness

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In this analysis, we delve into the revenue performance of various campaigns, exploring their individual contributions to the total revenue and assessing their effectiveness in driving sales.





# Insight of Campaign Effectiveness

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## **Homogeneous Distribution:**

- The data showcases a remarkably uniform distribution of revenue percentages across different campaigns, with values ranging from approximately 7.56% to 7.81%.
- This uniformity suggests a balanced allocation of revenue across campaigns, indicative of a well-structured marketing strategy or possibly external factors influencing consumer behavior uniformly.

## **Opportunities for Optimization:**

- Analyzing the performance of each campaign provides valuable insights for optimizing future marketing strategies.
- Identifying the characteristics of top-performing campaigns can inform decision-making processes, enabling businesses to allocate resources more effectively and enhance overall revenue generation.

## **Continuous Evaluation and Adaptation:**

- The dynamic nature of consumer preferences and market trends necessitates continuous evaluation and adaptation of marketing campaigns.
- By closely monitoring campaign performance metrics and incorporating feedback loops, businesses can stay agile and responsive, maximizing revenue opportunities in an ever-changing landscape.

# Query Across Countries

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```
-- Total Revenue by Country ("Comparing Total Revenue Across Countries")
SELECT
  ca.country,
  SUM(cp.revenue) AS total_revenue
FROM
  cs_payment cp
INNER JOIN
  cs_address ca ON ca.username = cp.username
GROUP BY
  ca.country
ORDER BY
  total_revenue DESC;
```

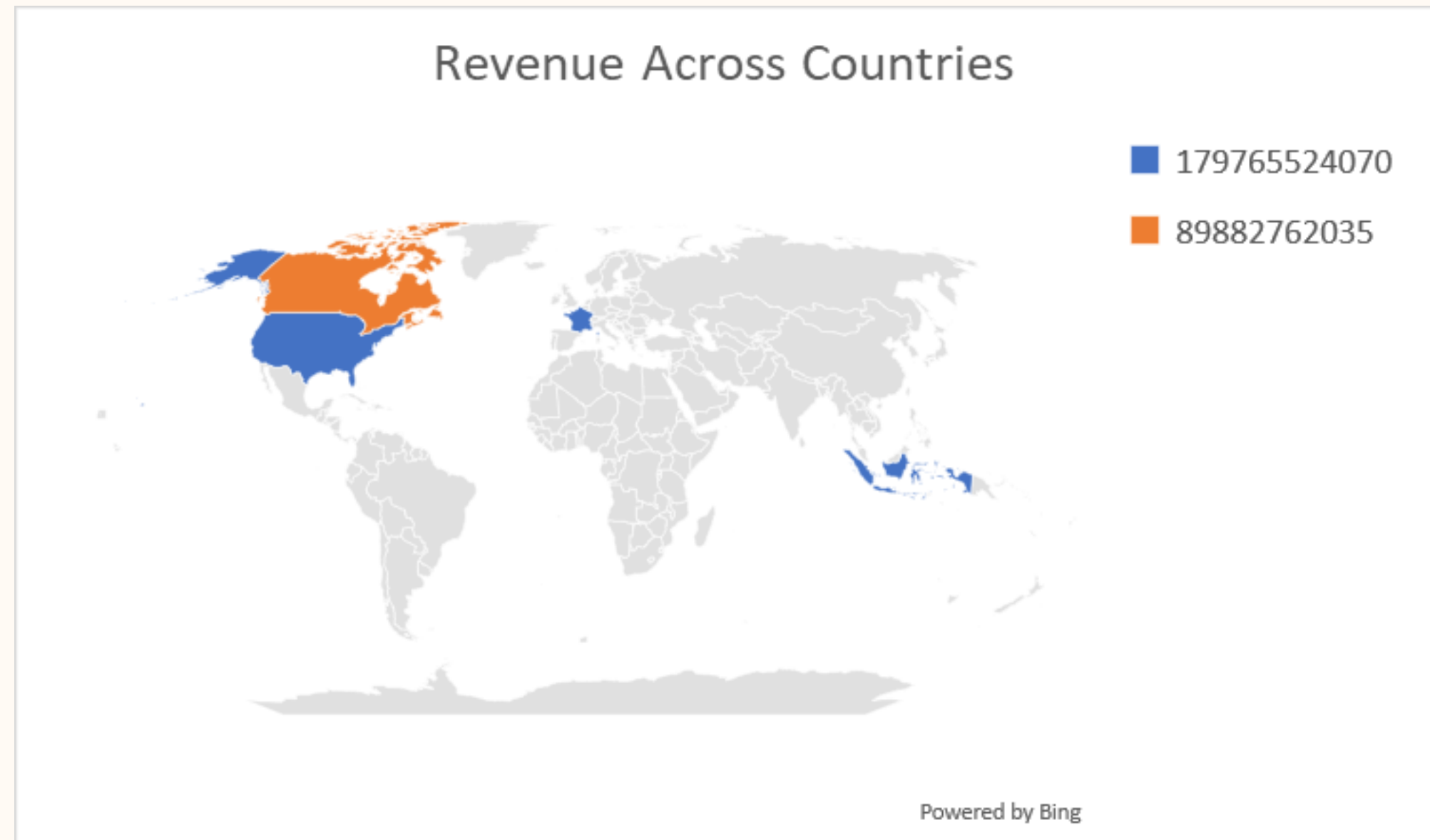
	ABCcountry	123total_revenue
1	indonesia	179,765,524,070
2	america	179,765,524,070
3	singapore	179,765,524,070
4	france	179,765,524,070
5	england	89,882,762,035
6	canada	89,882,762,035



# Revenue Across Countries Analysis

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Our analysis dives into the total revenue generated across different countries, shedding light on the revenue landscape and highlighting significant patterns and insights.



# Insight of Revenue Across Countries

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## Regional Dynamics

- It's intriguing to observe that both England and Canada exhibit exactly half of the total revenue of the other countries.
- This symmetry suggests a potential regional correlation or a deliberate economic strategy.

## Contrast in Economic Impact

- Despite the uniform revenue figures, the economic impact varies drastically between countries due to differences in population, GDP, and market dynamics.
- Larger economies like America and Indonesia may perceive this revenue differently compared to smaller nations like Singapore or France.

## Implications and Considerations:

- The uniformity in revenue prompts further exploration into the underlying factors driving this phenomenon.
- Understanding the nuances of each country's market dynamics and economic policies can provide valuable insights for businesses operating in these regions

# Query Payment Methods

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```
SELECT
  payment_method,
  SUM(revenue) AS total_revenue
FROM
  cs_payment
GROUP BY
  payment_method
ORDER BY
  total_revenue DESC;
```

	ABC payment_method	123 total_revenue
1	MANUAL_TRANSFER	6,541,131,219
2	BALANCE	3,273,538,492
3	PAYLATER	3,266,760,849
4	VIRTUAL_ACCOUNT	3,259,075,371
5	GOPAY	1,636,046,476

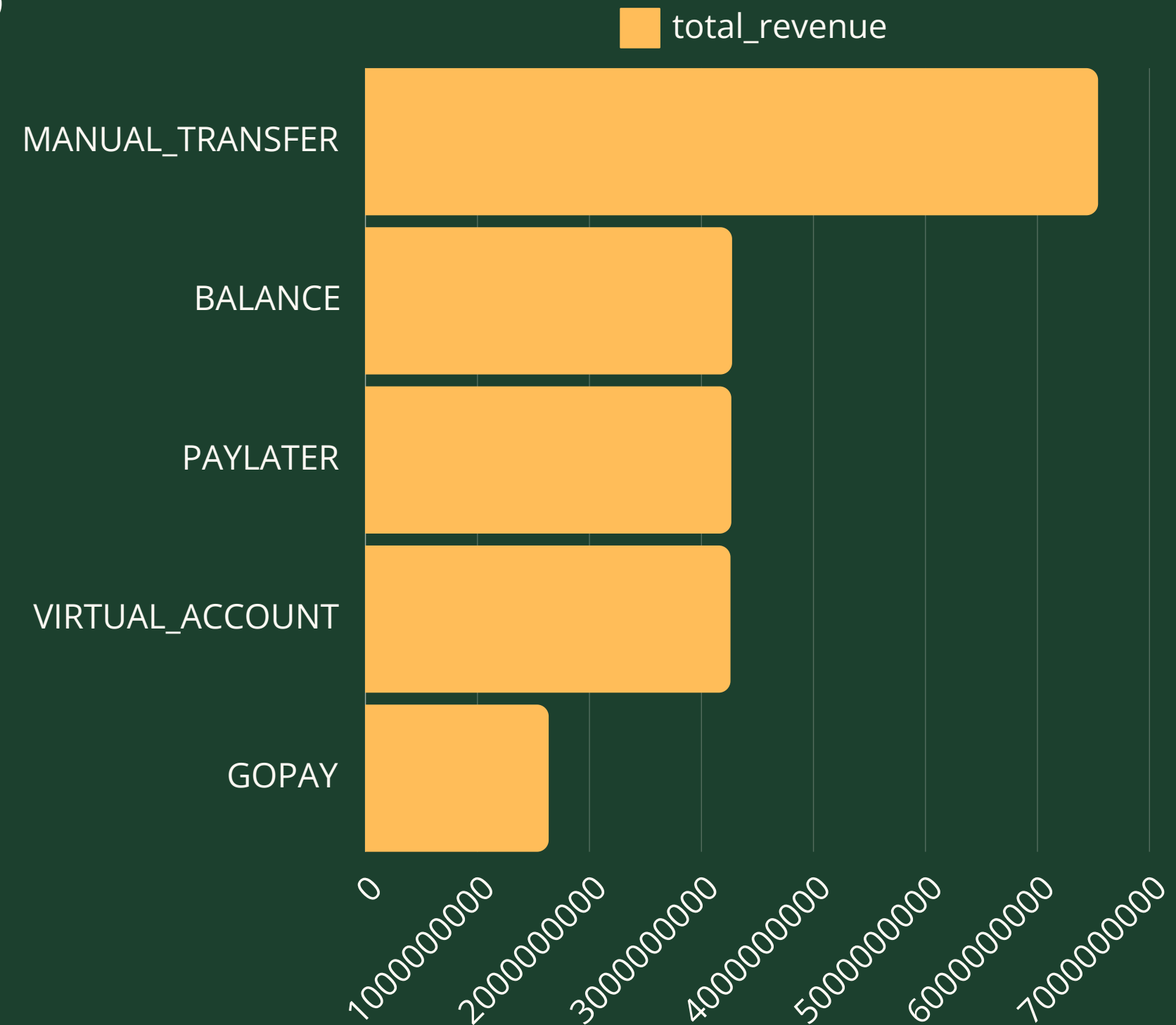
- Briefly elaborate on the observation

# Payment Methods Analysis

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In this analysis, we delve into the total revenue generated through different payment methods, uncovering intriguing patterns and insights that shed light on consumer behavior and preferences.

- Briefly elaborate on the observation



# Insight of Payment Methods

## 1. Dominance of Manual Transfer:

- Manual transfer emerges as the leading payment method, contributing a significant portion to the total revenue.
- This dominance suggests a substantial portion of consumers still prefer traditional banking methods for transactions, perhaps due to familiarity or trust

## 2. Virtual Accounts: Bridging the Gap:

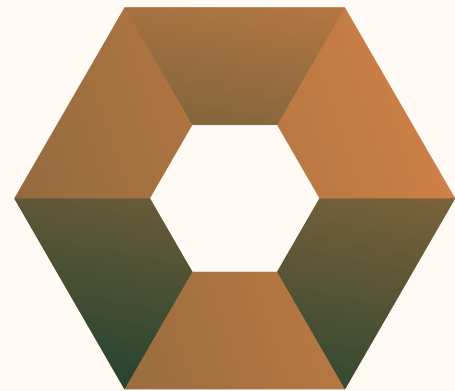
- Revenue from virtual accounts closely trails behind manual transfers, indicating a growing acceptance and adoption of digital payment solutions.
- Virtual accounts serve as a bridge between traditional banking methods and modern digital transactions, offering convenience without compromising security.

## 3. Strategic Implications:

- Understanding the revenue dynamics of different payment methods is crucial for businesses to tailor their strategies and optimize revenue streams.
- By offering a diverse range of payment options and aligning with consumer preferences, businesses can enhance customer satisfaction and drive overall revenue growth.

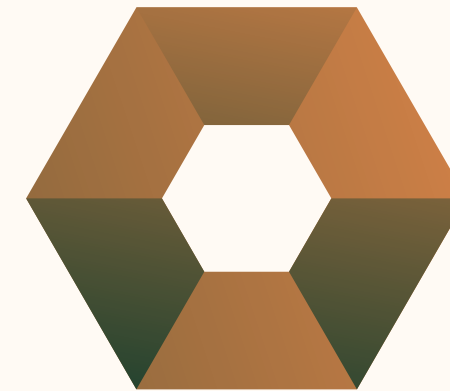
# Recommendations

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## **Revenue Across Countries**

Tailor marketing strategies to target specific regions based on economic dynamics and consumer behavior.



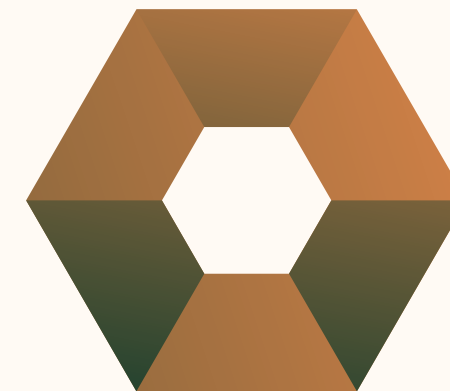
## **Campaign Effectiveness Analysis**

Analyze the characteristics of successful campaigns to inform future marketing strategies and optimize ROI.



## **Campaign vs. Non-Campaign Revenue Performance**

Allocate resources strategically to high-performing campaigns while exploring innovative approaches to enhance non-campaign revenue.



## **Payment Methods Analysis**

Explore ways to incentivize alternative payment methods to diversify revenue streams and cater to evolving consumer preferences.

# Get In Touch

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