Bolt’s home task, Marketing measurement for new channel

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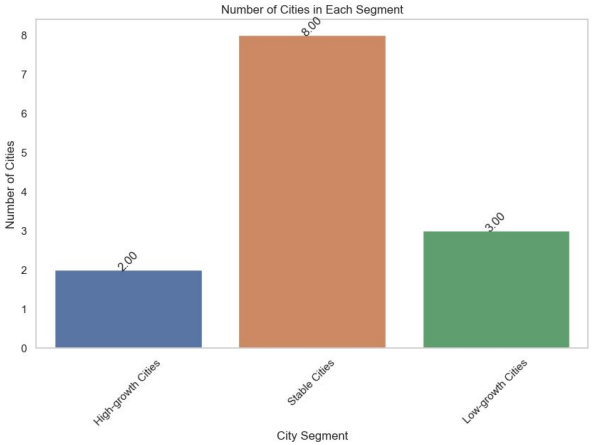
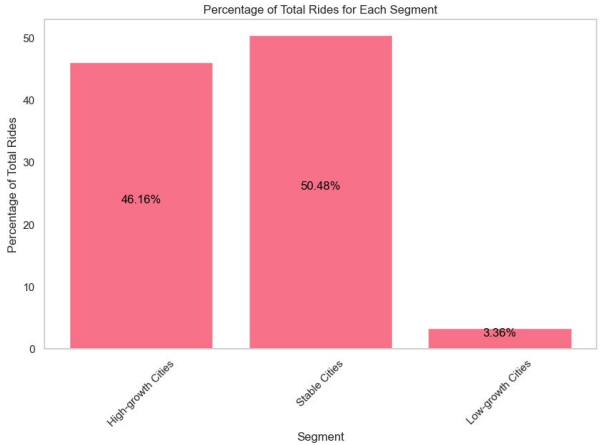
Cities Segments

Overview of Order and city segments





High-growth Cities: 46.16% of the total orders comes from high-growth cities. These are cities that have a high average number of rides per day and have shown significant growth over time.

Stable Cities: 50.48% of the total orders comes from stable cities. These cities have a moderate number of rides per day and have shown stable growth over time.

-Low-growth Cities: 3.36% of the total orders comes from low-growth cities. These cities have a low number of rides per day and have not shown significant growth over

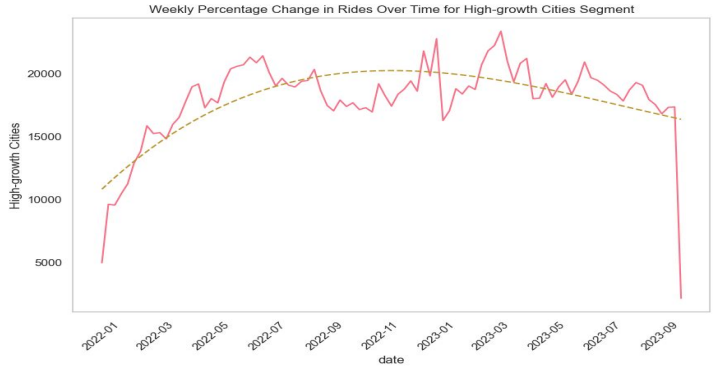
High-growth cities: These are cities that have a high average number of rides per day and have shown significant growth over time. The cities in this category are **Warsaw and Poznan.**

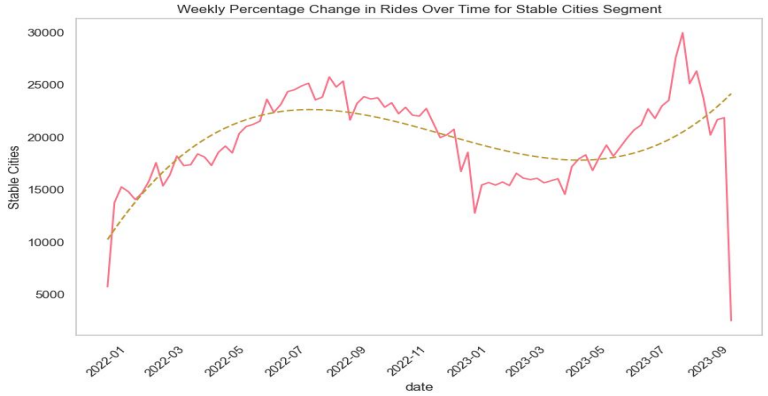
Stable cities: These cities have a moderate number of rides per day and have shown stable growth over time. The cities in this category are **Częstochowa, Kielce, Bydgoszcz, Wrocław, Szczecin, Krakow, Gdansk, and Zabrze.**

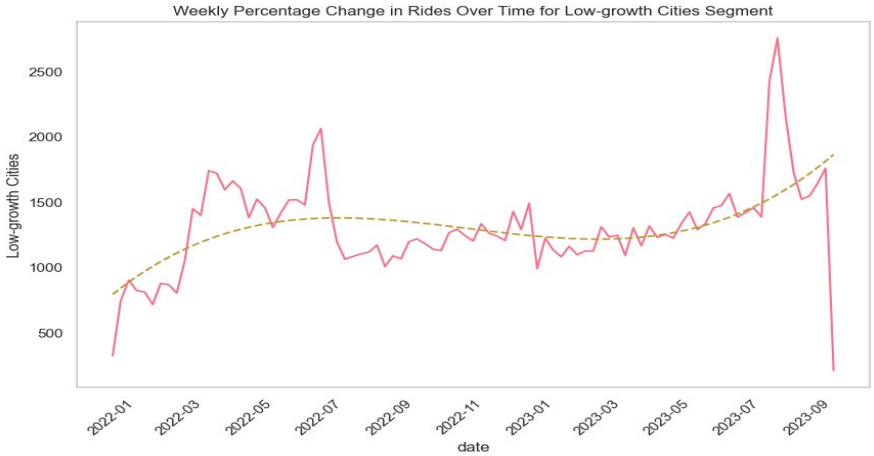
Low-growth cities: These cities have a low number of rides per day and have not shown significant growth over time. The cities in this category are L**ublin, Katowice, and Rzeszow**. These are cities not advisable to launch

Daily Average change in order volumes

% change in orders on daily basis







High-growth Cities: The average percentage change in rides for high-growth cities is approximately 0.96%. This indicates a steady increase in the number of rides in these cities. However, the standard deviation is 0.15, which suggests that there is a significant variation in the weekly percentage change in rides. This could be due to various factors such as seasonal trends, promotional campaigns, or changes in market conditions.

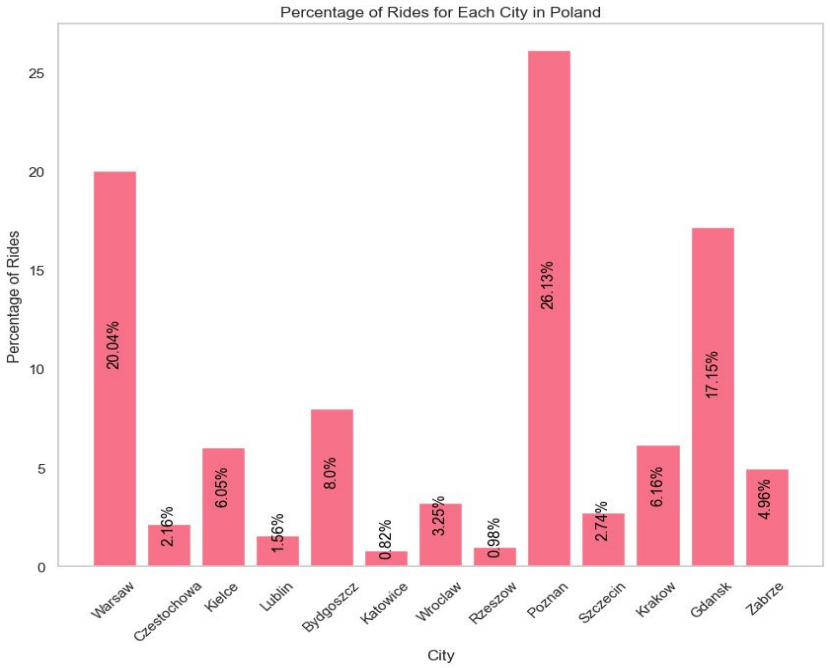
Stable Cities: The average percentage change in rides for stable cities is approximately 1.40%. This is higher than the high-growth cities, indicating a more consistent increase in the number of rides. The standard deviation is 0.09, which is slightly lower than the high-growth cities, indicating a lower variation in the weekly percentage change in rides.

Low-growth Cities: The average percentage change in rides for low-growth cities is approximately 2.36%. This is significantly higher than both high-growth and stable cities. However, the standard deviation is also the highest at 0.22, indicating a high level of variation in the weekly percentage change in rides.

Cities Overview

The most of demand comes from the Warsaw, Poznan and Gdansk

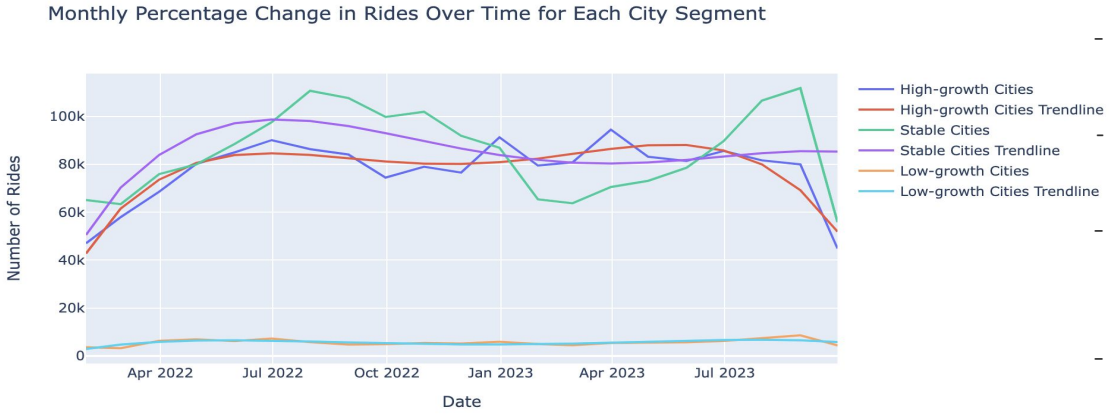
Poznan takes the lead with an impressive 26.13% share of rides, followed by Warsaw at 20.04% and Gdansk at 17.15%. Notable markets also include Bydgoszcz at 8.00%, Krakow at 6.16%, and Kielce at 6.05%. These figures highlight the distribution of rides among key cities, providing valuable insights for targeted marketing efforts to capitalize on the substantial user engagement in these specific locations.

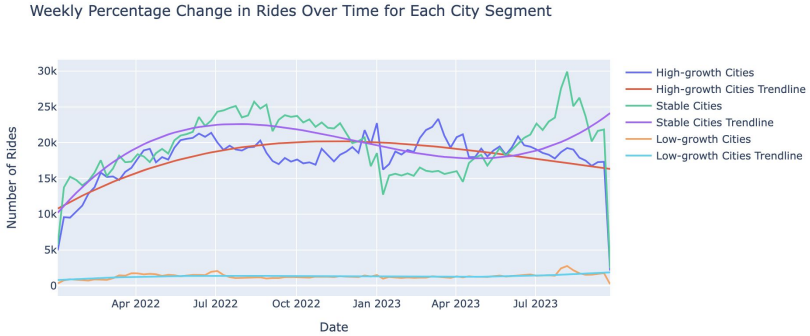


For cities like Zabrze, Wroclaw, Szczecin, Częstochowa, Lublin, Rzeszow, and Katowice, where the concentration of rides/market share is relatively lower (ranging from 4.96% to 0.82%), it is good to either prioritize or reconsider launching with extensive marketing campaigns. The limited rideshare in these cities indicate lower demand or market potential for Bolt, prompting a more strategic allocation of resources to more promising locations; the rest 6.

Percentage changes across segments

Plot Monthly trend for each city segment





- Each city category's data follows a right-skewed distribution, with more frequent lower values and occasional higher outliers.
- **Stable and High-growth** cities generally have higher values and wider distributions compared to **Low-growth** cities.
- Comparing Distributions:
  - Central Tendency: **High-growth** cities have the highest median and potentially mean compared to the other categories
- Seasonal Trends:
  - **High-growth** cities: Show a consistent increase in rides over time, with some seasonal fluctuations.
  - **Stable** cities: Remain relatively stable with some seasonal variations.
  - **Low-growth** cities: Exhibit smaller fluctuations, though the 2023 summer months show a slight uptick.

Comparing Average Change and Total Rides

The analysis of daily total order changes across cities reveals varying trends in different regions

The analysis of daily total order changes across cities reveals varying trends in different regions. In the first quarter of the data, we observe a consistent positive growth in daily total orders for most cities, with significant fluctuations in segments. Subsequently, the overall trend shows a mix of growth and stability, with occasional fluctuations in specific segments. Particularly noteworthy is the city of Katowice, where an abrupt increase in daily total orders occurred in March 2022, impacting the overall trend. The study concludes with a slight decline in daily total orders in the last month, September 2023(18 days). These insights provide valuable information for understanding the dynamics of order changes and can inform strategic decision-making for businesses in these regions.

Benchmarking,Budget Range,ROI

What minimal budget should the campaign have, so that we are able to measure its impact afterwards?

Budget Range:
The recommended minimum budget range for the TweetX marketing campaign is set between 7070.65€ and 14141.31€. This range is calculated to ensure a substantial impact and meaningful data collection for performance evaluation.

Expected Rides Range:
Anticipated rides resulting from the TweetX campaign fall within the range of 5302.99 to 10605.98. This projection aligns with the industry benchmark and potential user response, factoring in the historical performance of similar channels.

Expected Revenue Range:
The expected revenue range is estimated to be between 31817.94€ and 63635.89€. This calculation is based on the average profit per ride in Poland (6€), ensuring a positive return on investment.

ROI Range:
The Return on Investment (ROI) is projected to be between 1.25X and 8.00X. This range signifies the potential profitability of the campaign, with higher values indicating a more successful investment.

City Budget Splits

This is the city splits of the minimum budget

Gdansk: 401.73975€

Bydgoszcz: 189.05400€

Kielce: 141.79050€

Krakow: 141.79050€

Zabrze: 118.15875€

Wroclaw: 70.89525€

Szczecin: 70.89525€

Czestochowa: 47.26350€

Lublin: 47.26350€

Katowice: 23.63175€

Rzeszów: 23.63175€

Which Cities can we Launch the campaigns?

Recommendations

After a comprehensive analysis of the marketing data and campaign projections, I would like to recommend launching TweetX campaign in **6** cities where Bolt currently holds over 5% market share.

Rationale:

Maximizing Impact:
Cities with over 5% market share are already established strongholds for Bolt in Poland.
Launching the TweetX campaign in these cities allows us to capitalize on our existing user base and maximize the impact of the new advertising channel.

Brand Presence:
These cities likely have a higher brand presence, making it more likely for the TweetX campaign to gain attention and engagement. Leveraging the existing brand loyalty in these areas can significantly contribute to the success of the campaign.

Optimal Resource Utilization:
Focusing on cities with substantial market share ensures optimal resource utilization.
The campaign can achieve scale and generate significant data for analysis without spreading resources thinly across all cities.

These cities are Poznan, Warsaw,Gdansk,Bydgoszcz,Krakow and Kielce

What's the best way to measure the impact of the campaign? What would be a good data-driven framework?

→ Set the Primary and Secondary KPIS(Rides,Revenue,Cost, CTR,Conversion Rate,CPA,ROI)

→ Segmentation and Attribution(City level segmentation, Time Segmentation) e.g Bayesian Optimization

→ Control Groups(per city)

→ Benchmarking(compare TweetX with other industry standards)

→ Incremental testing(AB)

→ Attribution Modelling(Multi touch)

→ Data Visualizations

→ Post-campaign analysis and improvements

This precise measurement framework provides Bolt with actionable insights into the TweetX campaign's impact on rides, revenue, and overall profitability. By focusing on key metrics, segmentation, control groups, and a mix of quantitative and qualitative measures, Bolt can make data-driven decisions to refine the campaign strategy and enhance future marketing initiatives. Regular monitoring and adjustments based on real-time data will ensure optimal performance throughout the campaign.

Recommendation for Launching TweetX Campaign in Poland:

Considering the provided data and the objective of expanding Bolt's business in Poland through the TweetX campaign, here are the key recommendations:

1. Target Cities with Over 5% Market Share:
- Focus on launching TweetX in cities where Bolt already has a substantial market share, preferably over 5%. This ensures a higher potential impact on rides and revenue, leveraging existing brand presence.

2. Optimize Budget Allocation:
- Allocate the budget within the recommended range of 7070.65€ - 14141.31 €. This range aligns with industry benchmarks and allows for a meaningful impact while maintaining cost-effectiveness.

3. Prioritize Cities with Higher Recommended Minimum Budget:
- Prioritize cities with a higher recommended minimum budget for measurable impact. Gdansk, Bydgoszcz, and Kielce have higher suggested minimum budgets, indicating a potentially higher impact on rides.

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4. Monitor Expected Rides and Revenue:
- Regularly monitor the expected rides and revenue ranges (5302.99 - 10605.98 rides and 31817.94€ - 63635.89€ revenue). This will provide real-time insights into the campaign's performance against set targets.

5. Set ROI Targets:
- Set realistic ROI targets within the range of 1.25X - 8.00X. This ensures that the campaign generates a positive return on investment and contributes to overall business profitability.

6. Geographic Segmentation:
- Leverage geographic segmentation to understand performance variations across different cities. Adjust campaign strategies based on insights to optimize results in each location.

7. Utilize Industry Benchmarks:
- Consider industry benchmarks for CPA (6€ - 12€) and CPM (2€ - 4€) to gauge the campaign's cost-effectiveness. Ensure that the campaign metrics align with or outperform these benchmarks.

8. Implement Attribution Models:
- Implement attribution models to accurately attribute rides and revenue to the TweetX campaign. Choose a model that best reflects user behavior and campaign impact.

9. Evaluate Competition:
- Analyze the competition, taking into account the budget spent on similar channels. Benchmarking against competitors provides context for performance evaluation and strategic decision-making.

10. Continuous Monitoring and Optimization:
- Establish a robust monitoring system for continuous evaluation of campaign performance. Regularly optimize targeting, messaging, and budget allocation based on real-time insights.

11. Consider Customer Segmentation:
- Segment users based on demographics, behavior, or user type to tailor campaign strategies. Understanding how different user segments respond to TweetX will enhance targeting efficiency.

12. Post-Campaign Analysis:
- Conduct a thorough post-campaign analysis to evaluate overall success, learnings, and areas for improvement. Document key insights to inform future marketing strategies and campaigns.

Conclusion:
Launching TweetX in Poland presents a valuable opportunity for Bolt to expand its reach and increase market share. By strategically implementing the above recommendations, Bolt can maximize the impact of the campaign, drive growth in key cities, and establish a strong foundation for future expansions.

Analysis Assumptions

Homogeneous Market Response:

Assuming that the market response to the TweetX campaign is relatively uniform across different cities in Poland. This might not account for potential regional variations in user behavior, preferences, or market dynamics.

Similarity to Snapchat:
Assuming that the performance of TweetX will be similar to Snapchat, as mentioned in the context. This assumes that the two platforms have comparable user bases, engagement levels, and advertising effectiveness.

Consistent Industry Benchmarks:
Assuming that industry benchmarks for CPA and CPM provided by TweetX are consistent and applicable to the ridesharing market in Poland. This might not consider specific nuances or unique characteristics of the market.

Stable External Factors:
Assuming that historical ride data is sufficient and accurately represents the typical performance of Bolt's services in Poland. Inadequate historical data might lead to inaccurate predictions and benchmarks.

Budget Allocation Efficiency:

Assuming that external factors, such as economic conditions, competitive landscape, and regulatory environment, remain relatively stable during the campaign period. Sudden changes in these factors could impact campaign performance.

Attribution Accuracy:

Assuming that the chosen attribution model effectively attributes rides and revenue to the TweetX campaign. Different attribution models may yield varying results, and the assumed model's accuracy is crucial.

User Behavior Consistency:
Assuming that user behavior remains consistent over the campaign period. Changes in user preferences, external events, or cultural shifts may influence how users respond to the campaign.

Sufficient Historical Data:

Assuming that budget allocation across cities is optimized for the best possible results. This assumes a uniform impact of the campaign across all cities, which may not be the case.

Operational Stability:
Assuming that Bolt's operational and technical infrastructure remains stable and capable of handling potential surges in ride demand generated by the campaign.

User Response to New Channel:
Assuming that users will respond positively to the introduction of a new advertising channel (TweetX) and that it won't have adverse effects on user engagement or brand perception.