

# LoMo E-commerce Data Analytics Program



**Zeng Fanyi**

Data Driven | Business Insights | Master of NUS-ISS

Tel: +(65) 89416980

Email: [zfyni@hotmail.com](mailto:zfyni@hotmail.com)



# Analysis of 4 Concerns in LoMo E-commerce Thailand Operations

Focuses on the “**order**” and “**customer**” aspects  
Of LoMo E-commerce Project

Covers both the **CMO** and **CFO** challenges of  
Recruitment practical exercise



Question 1: Which **product category** has the **best performance**?

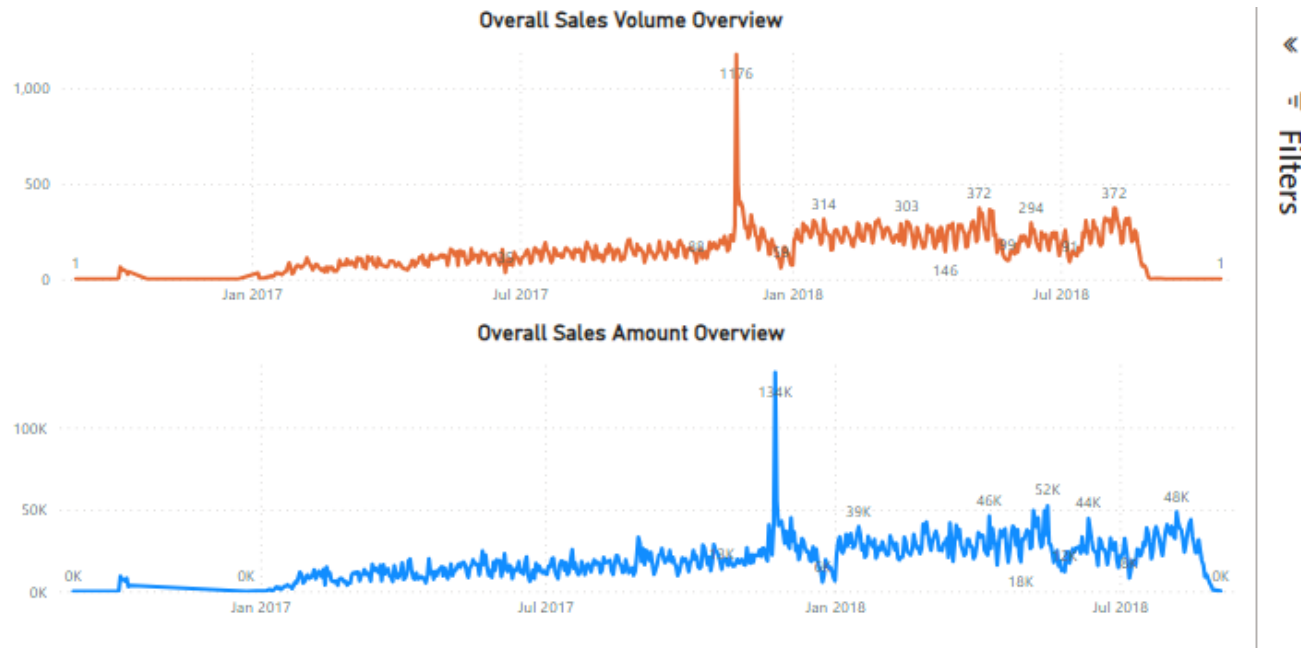
Question 2: Which **product category** has has the **highest potential**?

Question 3: How should **customer marketing** be **prioritized**, and will these strategies be **regionally** influenced?

Question 4: What can be inferred from the data as to why customers **do or do not provide reviews**?

Question 5: What is the link between **customer satisfaction** and **product quality**?

# Overview and Analysis Summary



Filters

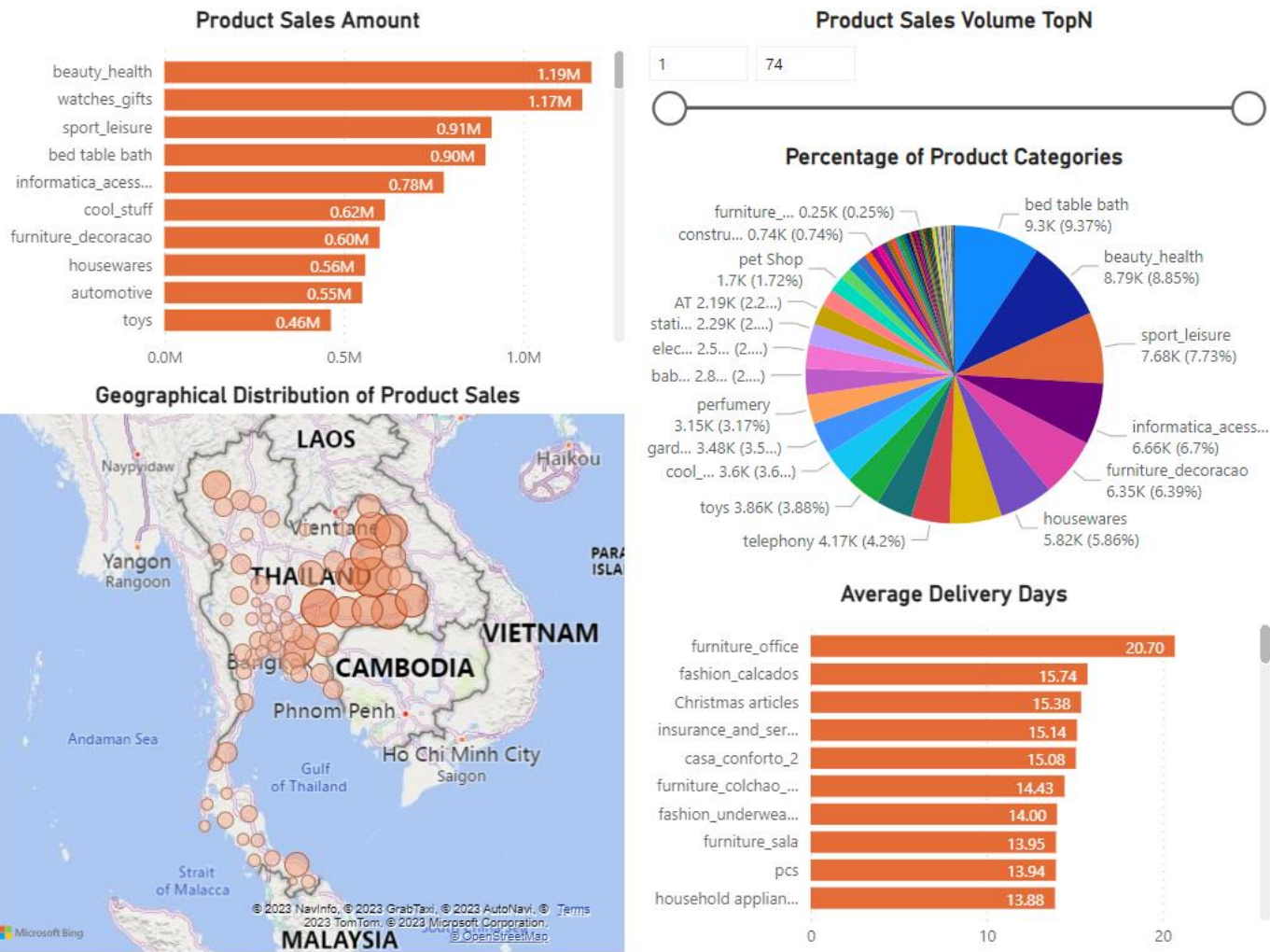
## Analysis Summary

1. During the period 2016-2018, **LoMo Thailand** overall operating conditions were **favorable**.
2. **Top 1 Overall Performers Product:** "bed\_table\_bath"
3. Based on **sales forecasts**, the next quarter should focus on the "bed\_table\_bath".
4. Enhancing **product quality** and **tailoring customer market strategies**.
5. There are **regional differences** in the product performance of LoMo Thailand.
6. Most users have a **positive reviews** of LoMo Thailand.

## Analytical Tools and Methods

- The analysis tools used include: R, Python, Tableau, PowerBI, Excel, and so on.
- The methods used for analysis include: data visualization, time series analysis, data forecasting, and text analysis.

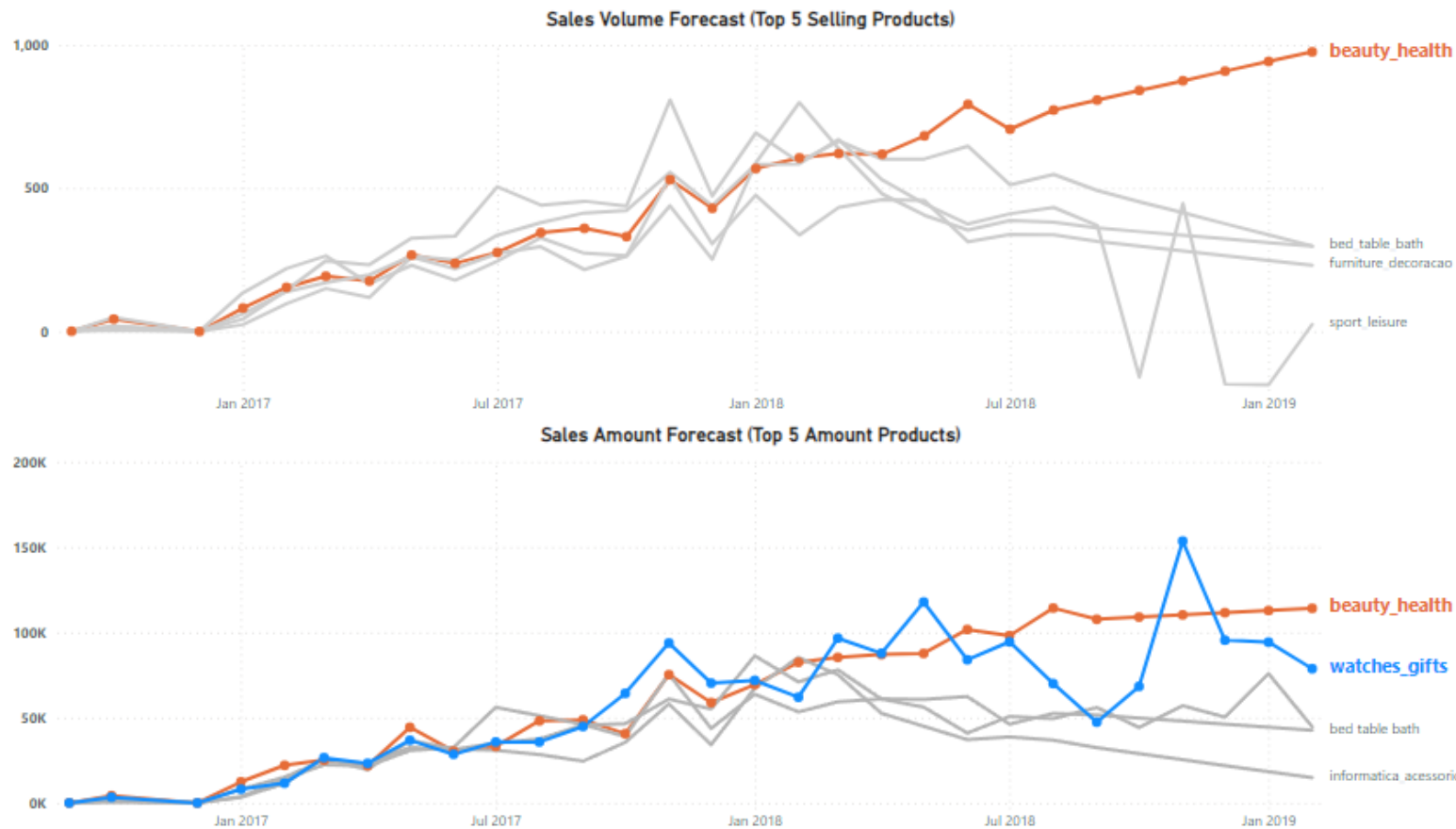
# Q1: 4 Types of Performance in TopN Product Categories



## Product Performance Insights

- Top 5 Overall Performers:** “bed\_table\_bath”, “beauty\_health”, “sport\_leisure”, “watches\_gifts”, “informatica\_acessorios”
- Considering both Product Sales Volume and Product Sales Amount, “beauty\_health”, “bed\_table\_bath”, and “sport\_leisure” performed the best.
- “watches\_gifts” contributed the second-highest sales amount, despite having relatively low sales volume.
- Product sales perform best in the **central and eastern**.
- Normal Delivery Days in LoMo Thailand: **10-14 days**

## Q2: Forecast of Sales Volume and Sales Amount for the Next 6 Months



Filters

### Product Sales Prediction Insights

In the next 6 months, both **"beauty\_health"** and **"watches\_gifts"** are predicted to perform well, so we can focus on them!

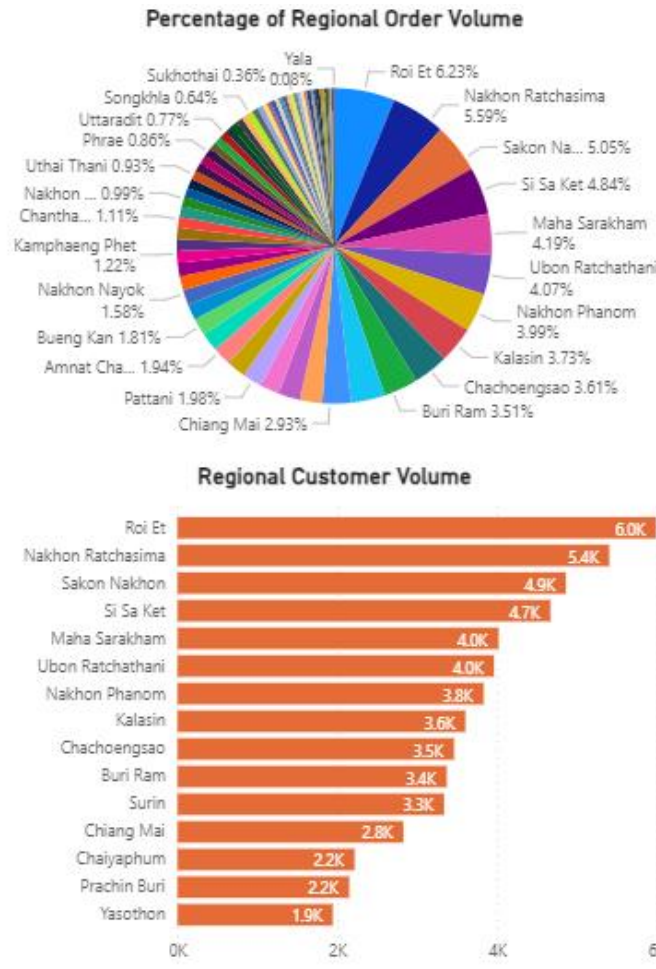
Among them, **"beauty\_health"** performs the best in both indicators.

\* Forecasting by historical data, the real situation may be affected by external factors.

- \* Removed Sep 2018 and Oct 2018 data due to significant missingness.
- \* Conducted 6-month time series forecasts from Sep 2018 to Feb 2019.



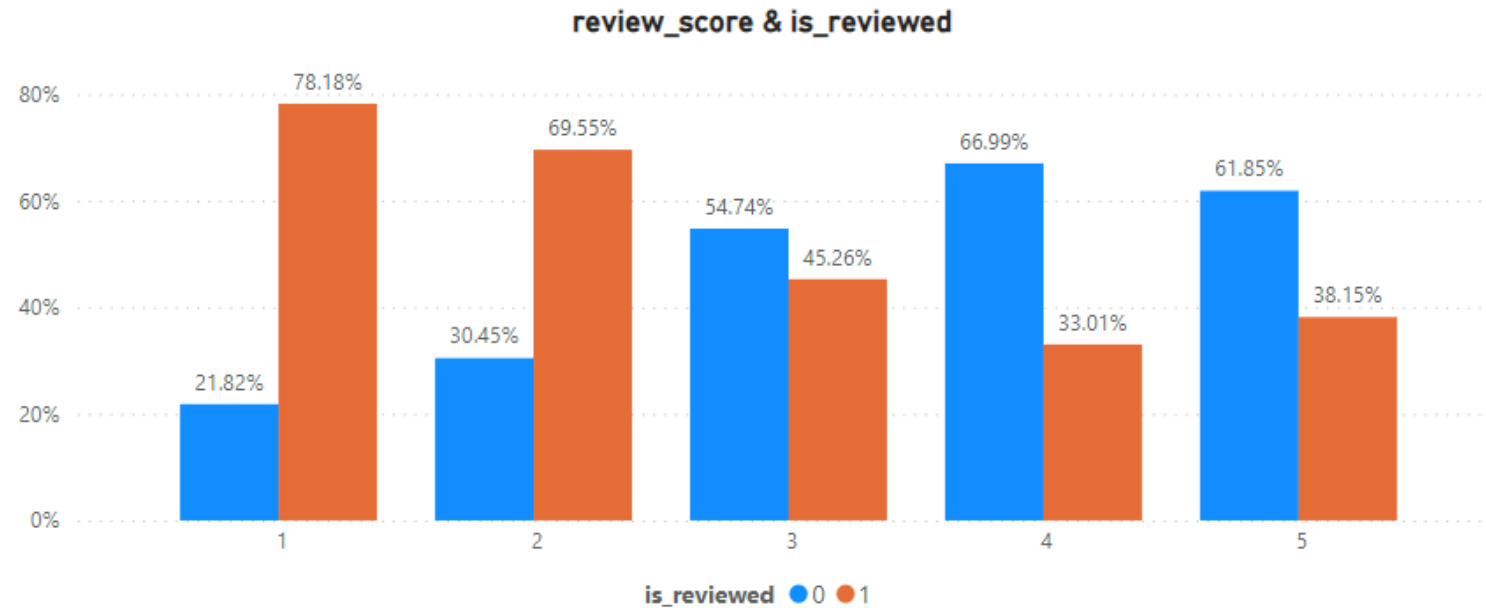
# Q3: Regionalized Customer Marketing Strategy



## Customer Marketing Strategy

- Prioritize operations in the **central** and **eastern** regions.
- Focus on the **Top N products** that are performing well (Top 5).
- Prioritize products such as "beauty\_health", which has a **good prediction in sales**.

## Q4: The Review Score Affects Whether a Review is Provided



### Review Score Insights

“review\_score” has a **negative** effect on “is\_reviewed”

- Negative relationships in bar graphs
- Passed the chi-square test at the 1% significance level  
( p-value < 2.2e-16 )



**Customer Satisfaction** impacts the **Review Score**, which in turn affects **whether provide reviews**.

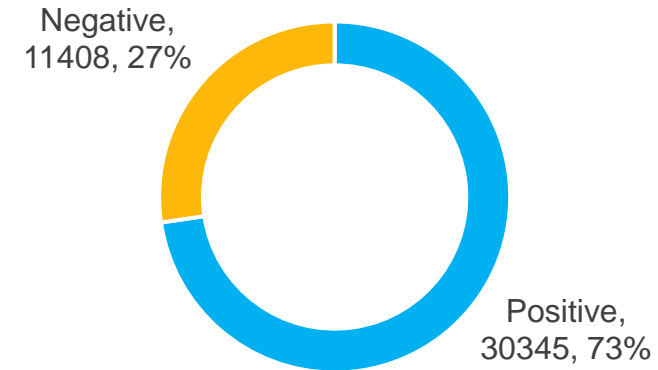
# Q5: Relationship Between Customer Satisfaction and Product Quality

Coefficients:	Significance of impact
product_description_lenght	***
product_photos_qty	
shipped_on_time	***
delivery_time	***
price	
freight_value	***
payment_type	**
payment_installments	***
customer_area	

Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

\* Based on Multivariate Regression Analysis and Text Sentiment Analysis

## Review Sentiment Analysis



## Customer Satisfaction Insights

- Most (**73%**) consumers have **positive reviews** of the product
- Product **quality improvement** can start from the following aspects:  
product\_description, shipped\_on\_time, delivery\_time, freight\_value, payment\_type, payment\_installments





## LoMo E-commerce Data Analytics Program

Thanks for your recognition!

**Zeng Fanyi**

Data Driven | Business Insights | Master of NUS-ISS

Tel: +(65) 89416980

Email: zfygni@hotmail.com