[IS434]

SOCIAL ANALYTICS & **APPLICATIONS**

Team 3 Group Project: Proposal

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1. The Client: Creamier

Established in 2011, Creamier is a local artisan ice cream and coffee parlour. The venture first started out as a heartland café in Toa Payoh, one of the oldest heartland estates in Singapore, and has since won the hearts of many locals. Currently, Creamier has two physical store outlets in Toa Payoh and Gillman Barracks, as well as an online store. It operates based on a localised strategy, targeting primarily residents and workers near their physical stores.

Creamier's primary focus is on ice cream, and its menu boasts a series of unique local ice cream flavours, including whacky creations like their recent "Chocolate Tau Yew Tempeh Crunch" (dark soy sauce). The company has created more than 40 unique flavours in the last five years. Its top three competitors as identified by the manager are: Udders, Salted Caramel and The Daily Scoop.

As part of its marketing efforts, the client possesses its own official website, and has a presence across three social media platforms: Facebook, Instagram and Twitter. A brief summary of the relevant statistics as of current is as follows:

Platform	Facebook	Instagram	Twitter
Key Statistics	13,090 Likes	3,492 Followers	171 Followers
	23,593 Check-ins	174 Posts	523 Posts

Table 1 – Summary of Social Media Platforms



2. Business Problem

2.1 Extent of Reach and Engagement

Creamier understands the importance of having a strong social media presence in today's technology-driven business landscape. While it has constantly generated content across all three social media platforms, the effectiveness of these efforts is unknown. Consequently, the client would like to investigate the **customer reach and engagement** of their social media posts.

2.2 Understanding Customer Perceptions

The client's current social media strategies have largely been focused on output (i.e. pushing out content to its customers); Creamier has yet to monitor or evaluate what its customers are saying about them. Moving forward, the client has indicated an interest in **listening in on customer conversations** to gain a better understanding of customer perceptions and sentiments. These insights may be subsequently used to address any possible issues or guide upcoming strategies.

2.3 Competitor Analysis

Lastly, the client wishes to understand their social media standing compared to its **competitors**. This involves a study of their competitors' focus, targeted audiences and tactics.



3. Data

Collected data will stem from the three platforms that Creamier is currently active on for data collection. Data that will be collected/ obtained and studied across each platform has been summarised in Table 2 below. The team will adopt a three-pronged approach in collecting this data, to effectively address the three business problems identified above: Organisational Data (i.e. Creamier), Customer Data and Competitor Data.

Platform	Facebook	Instagram	Twitter
	No. of likes	Number of followers	Number of followers
	 Frequency of posts 	Frequency of posts	Frequency of posts
	 Number of posts 	Number of posts	Number posts
	 Number of tagged 	Number of tagged	Number of shares
	posts	posts	Number of retweets
Data to be	Number of check-ins	Number of	Tweet content
Collected	 Likes per post 	geolocation tags	• Replies
Collected	 Shares per post 	Likes per post	Mentions
	Post content	Post content	Hashtags
	 Comments 	 Captions 	
	 Mentions 	• Comments	
	 Hashtags 	Mentions	
	• Reviews	 Hashtags 	

Table 2 – List of Data to be Collected



4. Analysis

An emphasis will be placed on Facebook and Instagram, which have been identified as Creamier's primary social media channels. Three types of detailed analysis will be conducted, and are discussed in detail in Table 3.

Analysis	Objective	
Competitor Analysis	To determine Creamier's market share and positioning within the industry. The team will be comparing the social media presence and engagement levels of Creamier with that of its competitors. Factors that the team will be using for comparison include the following: • Content strategy for each platform • Number of followers (or the equivalent) for each platform • Number of mentions (or the equivalent) by customers for each platform • Level of engagement for each platform (number of shares, likes and comments)	
Content Analysis	To identify the type(s) of content, including its purpose and specific types of media or text used, that generate maximum engagement. This will be conducted not only by studying the media and text used, but also keywords that indicate the purpose of the post (e.g. posts promoting new launches vs posts promoting discounts). This will be done over 2 platforms, Facebook and Instagram.	
Customer Analysis	To investigate customer attitudes and perceptions towards Creamier based on consumer-generated content. This can include the study of sentiments towards Creamier as a whole, and its specific products.	

Table 3 – Types of Analysis



5. Limitations

Potential limitations identified for the course of this study:

- Data collection may be limited by protection of users' privacy
- Presence of fake profiles on social media platforms may introduce inaccuracy
- Engagement metrics may not accurately reflect actual user motivations (e.g. people may like or share a post for different reasons)

6. Technologies & Tools

Technologies/ Tools	Objective	
Instagram API	To retrieve data from Instagram	
Facebook Graph API	To retrieve data from Facebook	
Twitter API	To retrieve data from Twitter	
PyCharm	To develop codes to retrieve data and generate visuals	
SAS	Data Cleaning	
JMP		
OpenRefine		
Tableau	Data Visualisation	
Matplotlib Package (Python)	Data visualisation	

Table 5 – List of Potential Technologies and Tools

7. Team Contribution

Ang Chin Boon: Liaise with the client

Data Compiling
Data Cleaning

Kesmeen Tan: Data Crawler (Instagram)

Report Writing

Albert Bingei: Data Crawler (Facebook)

Report Compiling

Chow Pui Fang: Data Crawler (Twitter)

Slides expert

Loh Yan Zoey: Data Analyst

Data Visualization