

## Appendix

### *Case 1 - Setting the Direction for #RealGlow*

### **Template 1 – Analytics Problem Statement**

#### **Section 1 – Brand Context**

Brand: AURORA Skincare

Campaign: #RealGlow

Prepared by: \_\_\_\_\_

Date: \_\_\_\_\_

#### **Section 2 – Business Challenge**

Describe the core marketing or business issue that motivated the analytics initiative.

*Example:* Declining engagement and sentiment among Gen Z audiences, requiring a repositioning of brand perception toward authenticity and transparency.

Your summary (3–4 lines):

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#### **Section 3 – SMART Objectives and Funnel Stage Alignment**

Define measurable and time-bound objectives that connect to the marketing funnel.

<i>Objective #</i>	<i>Specific</i>	<i>Measurable</i>	<i>Achievable</i>	<i>Relevant</i>	<i>Time-bound</i>	<i>Funnel Stage (Awareness / Engagement / Conversion)</i>
1						
2						
3						

## Section 4 – Research Questions

Develop research questions that are aligned with the SMART objectives.

#	Research Question	Expected Metric(s)	Platform(s)	Data Source(s)	Funnel Stage
1					
2					
3					

## Section 5 – Key Platforms and Data Sources

Summarize where data will come from and how frequently it will be updated.

Platform	Data Type	Source / Tool	Update Frequency	Responsible Person
Instagram	Reach, Engagement	Meta Insights	Weekly	
TikTok	Views, Shares, Completion Rate	TikTok Analytics	Weekly	
YouTube	Views, Comments	YouTube API	Biweekly	
X (Twitter)	Mentions, Sentiment	Public API / Netlytic	Weekly	
Facebook	CTR, CPA	Ads Manager	Weekly	
LinkedIn	Article Reach, Engagement	Page Analytics	Monthly	
GA4	Sessions, Conversions	GA4 Dashboard	Weekly	

## Section 6 – Social-Listening Data Plan

Describe how qualitative conversation data will be collected to complement quantitative metrics.

*Example:* Track hashtags #RealGlow, #AuroraSkin, and competitor mentions to identify themes such as authenticity, trust, and efficacy.\*

Platform	Listening Focus	Tool / Source	Update Frequency	Purpose
X (Twitter)	Public mentions and hashtags	Netlytic / Talkwalker	Weekly	Assess tone and authenticity themes
Reddit	Skincare discussions in communities	Reddit API	Weekly	Identify emerging perceptions and concerns
YouTube	Video comments	YouTube API	Biweekly	Gather qualitative feedback on brand tutorials
TikTok	User captions and comments	TikTok export tools	Weekly	Explore trending language and challenges
Instagram	Hashtag usage (#RealGlow)	Meta Insights	Weekly	Monitor brand engagement and UGC tone

## Section 7 – Alignment & Feasibility Check

Confirm that the project is measurable, ethical, and achievable within the timeframe.

Criterion	Yes / No	Notes
Data available for all platforms		
Social-listening setup complete and validated		
Data collection methods ethical and compliant		
Objectives linked to measurable KPIs		
Timelines achievable within campaign window		
Roles and responsibilities clearly defined		

## Template 2 – KPI Mapping Matrix

Purpose: Translate each SMART objective into measurable KPIs, indicating its position in the funnel.

Objective ID	Funnel Stage	SMART Objective Summary	Research Question	KPI / Metric	Formula / Calculation	Platform(s)	Data Source	Update Frequency	Owner / Analyst
OBJ1	Awareness	Increase Gen Z engagement by 30%	Which platforms yield highest ER?	Engagement Rate (ER)	$(\text{Engagements} \div \text{Impressions}) \times 100$	Instagram, TikTok	Meta Insights, TikTok Analytics	Weekly	Social Analyst
OBJ2	Engagement	Improve positive sentiment by 20%	How does sentiment vary by content type?	Sentiment Score	$(\text{Positive} - \text{Negative}) \div \text{Total Mentions}$	X (Twitter), YouTube	Public APIs, Listening Tools	Weekly	Insights Lead
OBJ3	Conversion	Increase referral traffic by 15%	Which platforms drive site visits?	Conversion Rate (CR)	$(\text{Conversions} \div \text{Clicks}) \times 100$	Facebook, LinkedIn, GA4	GA4 Dashboard	Weekly	Data Analyst

## Template 3 – Data Collection Plan

Purpose: Define all data-acquisition sources (quantitative and qualitative).

Platform	Data Type(s)	Access Method / Tool	Frequency	File Format	Storage Location	Purpose	Responsible Team Member
Instagram	Reach, Likes, Comments	Meta Business Suite	Weekly	CSV	Data Folder	Engagement Tracking	Analyst 1
TikTok	Views, Shares, Comments	TikTok Analytics Export	Weekly	CSV	Data Folder	Video Performance	Analyst 2
YouTube	Views, Comments	YouTube Data API	Biweekly	JSON → CSV	Data Warehouse	Tutorial Analytics	Analyst 3
X (Twitter)	Mentions, Retweets, Sentiment	Netlytic / Public API	Weekly	CSV	Data Warehouse	Conversation Themes	Analyst 4
Facebook	CTR, CPA	Ads Manager Export	Weekly	CSV	Data Warehouse	Paid Campaigns	Paid Media Specialist
LinkedIn	Article Reach, Engagement	Page Analytics	Monthly	Excel	Shared Drive	Professional Audience	Brand Strategist
GA4	Sessions, Conversions	GA4 Dashboard	Weekly	CSV	Analytics Folder	Web Attribution	Web Analyst
Reddit	Thread Text	Reddit API	Weekly	CSV	Shared Drive	Consumer Discussions	Insights Lead

## Template 4 – Data Cleaning Checklist

Purpose: Ensure data is accurate, consistent, and analysis-ready.

Category	Task	Status (✓ / ✗)	Notes
File Integrity	Confirm all datasets received and readable		
Variable Names	Ensure consistent naming conventions		
Missing Values	Identify and address null or missing entries		
Duplicates	Detect and remove duplicates		
Date / Time	Standardize timestamps (UTC or local)		
Formatting	Verify units (e.g., percentages, counts)		
Content	Standardize post type, format, and theme tags		
Taxonomy			
Sentiment Values	Confirm polarity range between -1 and +1		
Listening Data	Standardize topic/theme labels from social-listening exports		
Network Data	Ensure unique node and edge identifiers		
Final Save	Export cleaned data to “Gold” layer directory		

## Template 5 – Synthetic Dataset (Sample)

Purpose: Demonstrate key variables used in early campaign analysis.

Platform	Post Type	Funnel Stage	Impressions	Engagements	Engagement Rate (%)	Sentiment Score (-1 to +1)	Link Clicks	Conversions
Instagram	Carousel	Awareness	25,000	1,250	5.0	+0.65	200	12
TikTok	Short Video	Awareness / Engagement	40,000	3,600	9.0	+0.78	300	22
Facebook	Paid Ad	Conversion	50,000	1,000	2.0	+0.60	500	40
YouTube	Tutorial	Engagement	15,000	900	6.0	+0.72	220	15
X (Twitter)	Thread	Engagement	10,000	300	3.0	+0.50	50	3
LinkedIn	Article	Conversion	5,000	400	8.0	+0.80	100	5

Use this dataset to practice calculating funnel-based KPIs and visualizing cross-platform differences.

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