Business Analyst Assignment

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Part 1: Prompt Engineering for Mass Personalization

Objective:

Design two AI prompts for generating mass-personalized outbound B2B email copies using the AIDCA model.

Prompt 1 - CTO of a D2C Brand

Prompt:

Generate a personalized outbound email for a CTO of a fast-scaling D2C brand.

Use the AIDCA framework:

- A Attention: Start with a sharp insight about tech inefficiencies in D2C growth
- **I Interest:** Reference recent trends in e-commerce infra strain
- **D Desire:** Show a case (e.g., "We helped a similar CTO reduce server costs by 30%")
- **C Conviction:** Build authority using peer benchmarks or credible sources
- **A Action:** Close with a soft CTA (e.g., "Open to a quick 15-min chat?")

Cialdini Principles Used:

- **Authority:** Referencing peer performance or trusted research
- **Reciprocity:** Offer a no-commitment tech audit

Negative Prompt:

Avoid sounding like a generic SaaS pitch or using buzzwords like "revolutionary" or "game-changing."

Prompt 2 - COO of a Pharma SME

Prompt:

Write a personalized cold email targeting a COO of a mid-sized Pharma manufacturing firm.

Use the AIDCA framework:

- **A Attention:** Open with an efficiency stat in pharma ops
- **I Interest:** Highlight relatable problems like compliance issues or legacy systems
- **D Desire:** Mention a win (e.g., "We helped a COO automate 4 compliance tasks without disrupting core systems.")
- **C Conviction:** Include pharma-specific proof (compliance metrics, industry adoption)
- **A Action:** CTA with light urgency (e.g., "Quick 20-min demo slots this week")

Cialdini Principles Used:

- Scarcity: Limited demo availability
- Social Proof: Reference similar pharma firms

Negative Prompt:

Avoid proposing core system replacement. Don't use vague terms like "optimize" or "streamline" without context.

Part 2: Funnel Debugging via Prompt-Based Diagnosis

Simulated Funnel Data (3 Rows):

Stage Movement	Response Rate	Drop-off Reason	Campaign Message Summary	MMF Diagnosis
$\begin{array}{c} Lead \rightarrow MQL \rightarrow \\ SQL \end{array}$	High MQL, Low SQL	Lack of trust	Generic promises, no proof	Misfit in trust-building
$Lead \rightarrow MQL$	High Lead, Low Engagement	Over-complicate d copy	Tech-heavy, jargon-filled	Headline/Hook issue
$\begin{array}{c} \text{Lead} \rightarrow \text{MQL} \rightarrow \\ \text{SQL} \rightarrow \text{Client} \end{array}$	Healthy funnel	_	Proof-based, tailored message	Good MMF

Revised Prompts to Fix Issues:

Fix 1: For Scenario 1 - Trust Drop at SQL

- AIDCA Focus: Conviction
- Cialdini Principle: Authority + Social Proof
- Prompt Fix:

"Regenerate the email to SQLs with a quick case study (1–2 lines), citing a real brand we helped. Include third-party validation (e.g., Gartner, McKinsey stat). Avoid exaggeration."

• **Justification:** Anchors credibility at decision stage, helping build trust to convert.



🔧 Fix 2: For Scenario 2 - Low Engagement

- **AIDCA Focus:** Attention
- Cialdini Principle: Curiosity + Specificity
- Prompt Fix:

"Rewrite the subject + first line using an unexpected stat or surprising industry insight. Avoid abstract or over-engineered intros."

• **Justification:** Targets poor hook, making the email more scroll-worthy and relevant.

Part 3: Dashboard Design with Boardroom Intent

Dashboard Wireframe (can be built in Excel, Notion, or Google Sheets):

1. Funnel Conversion Metrics

- Leads → MQL Conversion Rate (%)
- MQL → SQL Conversion Rate (%)
- SQL → Client Close Rate (%)

2. Campaign-Level AIDCA Diagnosis

Campaign Name Persona Targeted AIDCA Drop Stage Noted Issue Fix Suggested

Pharma-Ops Pharma COO Conviction Generic claims Add real case study

D2C Infra D2C CTO Attention Weak subject Sharper hook

3. Strategic Recommendations

- Are messages resonating across funnel?
- Where is leadership needed messaging or targeting?
- Suggestions for next experiments
- Improve Desire stage: add ROI proof & case studies

Boardroom Benefit: Helps senior team act surgically — not blindly — to fine-tune funnel performance.

Part 4: Strategic Summary

AI has shifted our campaign approach to personalized messaging. Each email now starts with the prospect's real situation, shows clear results from a similar case, and ends with one clear next step. Using AIDCA and Cialdini models, the prompts are designed to fix the exact stage where leads drop (for example: building trust in Pharma, focusing on growth KPIs for D2C).

The dashboard turns data into clear decisions: it shows whether we're targeting the right people, if the message works at each stage, and where leaders need to step in.

As an Analyst, I see myself as an experiment architect—constantly testing and improving. I focus on strong inputs (facts, not vague words), track how each message moves leads forward, and use proof points (case results, artifacts, KPIs) in a standard way. The strategy improves week by week, based on real evidence not opinions because growth comes from pulling the right levers, not just collecting leads.