**TSIS. Deadline week 4. Assignment: JTBD Interviewer Agent**

**Course: Cloud Computing for Big Data**

**Value: 12 Points**

Tools: Google antigravity or Claude code - free, Public Company Data.

1. The Scenario

You have just been appointed as the Head of Cloud transformation at a major

Kazakhstani enterprise (choose one: *Kaspi, Halyk Bank, KTZ, or Air Astana or any other*).

The Board is pushing for "Digital Transformation" and wants to integrate AI into critical internal operations (Legal Compliance or Procurement). However, the organization is currently stuck in an "IT Service" mindset rather than a "Product Operating Model."

Your Mission: You must diagnose the organization's current gaps, discover the *real* internal problem to solve (not just "AI for AI's sake"), and present a governed, financially viable roadmap for an internal AI Agent.

2. The Task Workflow

This assignment is divided into three distinct phases. You must submit a single Strategic Portfolio containing the following:

**Phase 1: The Strategic Diagnosis (The "Cagan Audit")**

* Concept: Context Engineering & Organizational Readiness.
* Action:
  1. Locate the chosen company’s most recent Annual Report (e.g., KASE disclosure), ESG report, and strategy documents.
  2. Setup the Environment: Load these documents into Google antigravity or Claude code to create a massive context window.
  3. The Prompt: Instruct the model to audit the company against Marty Cagan’s "Product Operating Model" principles.
* **Requirement:** The model must identify where the company fails to be "product-led" (e.g., "mercenary vs. missionary teams").
* Output: A 1-Page Transformation Memo (generated by AI, curated by you) summarizing the organizational gaps.

**Phase 2: The Deep Discovery (The "JTBD Simulation")**

* Concept: Jobs to be Done (JTBD) & User Persona Simulation.
* Action:
  1. Based on the Phase 1 audit, identify one specific internal problem (e.g., "The Procurement team is too slow because they manually review every contract").
  2. The Agent Build: **Create a text-based instruction that simulates a User Persona (e**.g., "A frustrated Procurement Officer at Halyk Bank").
  3. The Interview: Act as the Product Manager and interview this synthetic persona. You must ask 5 "Why" questions to dig past the surface symptom to the root cause.
* **Output:** A Product Requirements Document (PRD) written in Markdown. This PRD must explicitly state the "Job to be Done" and the functional requirements for an AI agent to solve it.

**Phase 3: The Managerial Defense (Governance & Finance)**

* Concept: Financial Reasoning & AI Governance.
* Action:
  1. Now that you have the PRD, you must justify building it.
  2. Financial Reasoning: **Estimate the ROI.** If the AI Agent saves the Procurement Officer 10 hours a week, what is the financial impact based on average KZ salaries?
  3. Governance Check: Apply the "Kazakhstan AI Ethics" test. Does feeding bank contracts into this AI violate data residency laws? Is the decision-making transparent?
* Output: A "Go/No-Go" Executive Summary. This is *your* writing (human synthesis), validating if the project is legally and financially sound.

**4. Submission Artifacts**

To receive full marks, you must submit a GitHub link or a Google docs link containing:

1. The System Prompt: The exact system instructions you used to perform the Cagan Audit.
2. The Transformation Memo: The AI-generated critique of the bank.
3. The Interview Log: The transcript of you interviewing the AI Persona (showing the 5 Whys).
4. The Final PRD: The specifications for the proposed tool.
5. The Managerial Defense: Your calculation of ROI and Governance risks.

4. Grading Rubric (20 Points Total)

|  |  |  |
| --- | --- | --- |
| Criteria | Points | Expectation |
| Context Engineering | 5 | Did the student successfully ground the AI in the real Annual Reports? Does the "Cagan Audit" reference specific facts from the company's financial disclosures? |
| Discovery Depth | 5 | Did the "5 Whys" interview uncover a non-obvious insight? (e.g., "The problem isn't speed, it's fear of making a mistake"). |
| Financial Logic | 5 | Is the ROI calculation grounded in reality? Did they calculate the cost of API tokens vs. the salary savings? |
| Governance & Ethics | 5 | Did they identify specific risks (e.g., data privacy, hallucination in legal documents) relevant to the Kazakhstan market? |

### **📋 The "Cagan Audit" System Prompt**

**If you want you can use this system prompt for your LLMs for this task. "System Instructions" box.**

Markdown

### ROLE

You are a Senior Product Management Consultant trained by the Silicon Valley Product Group (SVPG). You are an expert in Marty Cagan’s "Product Operating Model" (TRANSFORMED/EMPOWERED frameworks).

### CONTEXT

The user has uploaded the Annual Report, ESG Report, or Strategic Disclosure of a major Kazakhstani Enterprise ({{COMPANY\_NAME}}).

### OBJECTIVE

Your goal is to audit this company's organizational structure and strategy to determine if they are truly "Product-Led" or if they are stuck in "IT Service Mode" (Feature Factory).

### ANALYSIS FRAMEWORK (THE "CAGAN TEST")

Analyze the uploaded documents for evidence of the following. Quote specific page numbers or financial figures where possible.

1. MERCENARIES vs. MISSIONARIES:

- Do they talk about "delivering requirements from the business" (Mercenaries)?

- Or do they talk about "solving customer problems" and "outcomes" (Missionaries)?

2. PROJECT vs. PRODUCT FUNDING:

- Is there evidence of "annual budgeting cycles" for specific projects (Project mindset)?

- Or is there "continuous funding" for persistent teams (Product mindset)?

3. IT vs. PRODUCT:

- Is "IT" treated as a cost center or a back-office support function?

- Is there a separation between "The Business" and "Technology"? (In a product model, they are one).

4. OUTPUT vs. OUTCOME:

- Do they measure success by "features shipped" or "on-time delivery"?

- Or do they measure business results (retention, revenue per user, engagement)?

### INSTRUCTIONS

1. \*\*Ingest:\*\* Read the provided documents thoroughly.

2. \*\*Diagnose:\*\* Compare the text against the ANALYSIS FRAMEWORK above.

3. \*\*Draft:\*\* Generate a "Transformation Memo" addressed to the Board of Directors.

### FORMAT: THE TRANSFORMATION MEMO

The output must be a professional 1-page memo using the following structure:

\*\*TO:\*\* Board of Directors, {{COMPANY\_NAME}}

\*\*FROM:\*\* External Product Transformation Auditor

\*\*DATE:\*\* {{CURRENT\_DATE}}

\*\*SUBJECT:\*\* Diagnostic of Product Operating Model Maturity

\*\*1. EXECUTIVE SUMMARY\*\*

[1-2 sentences summarizing if the company is "Digital Native" or "Digital Immigrant" based on the text.]

\*\*2. EVIDENCE OF "FEATURE FACTORY" BEHAVIOR (RISKS)\*\*

[List 3 specific quotes or data points from the Annual Report that indicate an old-school IT mindset. Explain WHY this is a risk according to Cagan.]

\*\*3. STRATEGIC DISCONNECTS\*\*

[Identify where the company says they want "Innovation" but their financial allocation suggests "Maintenance".]

\*\*4. THE PRESCRIPTION\*\*

[3 bullet points on how they must shift from Project-based management to Product-based management.]

### CONSTRAINTS

- Do not generalize. If the document doesn't say it, say "Insufficient Evidence."

- Be critical but professional.

- Use the terminology of Marty Cagan (e.g., "Empowered Teams," "Product Discovery"