## **Workshop Assignment: GenAI-Driven Business Capability Mapping (BCM)**

### **🎯 Objective:**

Learn how to generate and refine Business Capability Maps (BCMs) using Generative AI (GenAI) and prompt engineering, applying it to real-world use cases.

### **📚 Context:**

You are an Enterprise Architect at a consulting firm. Your task is to use a GenAI system to generate a Business Capability Map (BCM) for a client based on domain-specific business documents (e.g., annual reports, service descriptions, org strategy docs). This method should accelerate BCM development, improve consistency, and allow more time for strategic alignment and stakeholder iteration.

### **🧩 Assignment Structure (Hands-On Case-Based):**

#### **1. Industry Selection (Choose One):**

* 🚛 Supply Chain & Logistics
* 🏭 Manufacturing Operations
* 💼 Sales & Customer Engagement
* 🤝 Customer Experience & Service

#### **2. Input Simulation:**

You will be provided with a **text document** or use your own (real or hypothetical company brief). Alternatively, use the publicly available annual report or website content.

#### **3. Tasks:**

##### **✅ Part A – Document Analysis**

1. Upload or paste a domain-specific business document into the GenAI prompt.
2. Identify key business activities, goals, and terminology.
3. Extract **Level-1 Capabilities** (Tier 1–Strategic, Tier 2–Operational, Tier 3–Support).

##### **✅ Part B – Prompt Design**

1. Design your prompt using:  
   * Reference capabilities
   * Instructions for tiering
   * Rules for naming
   * Format specification (JSON or CSV)

##### **✅ Part C – GenAI Output Structuring**

1. Run your prompt using ChatGPT (or Claude if preferred).
2. Generate:  
   * A 2-level BCM (Level 1 and Level 2 capabilities)
   * Tier labels (Strategic, Operational, Support)
   * One-line descriptions
   * Output in JSON or CSV format

##### **✅ Part D – Post-Processing**

1. Refine the output:  
   * Are capabilities overlapping?
   * Are any capabilities missing?
   * Do names follow convention?
2. Use Excel or a visual tool like GoJS to present the map.

##### **✅ Part E – Critical Reflection**

1. Reflect on:  
   * Strengths of GenAI for BCM generation
   * Risks: hallucination, vague names, missing domain logic
   * Future improvements (e.g., training data, domain fine-tuning)

### **💡 Deliverables**

* Final Business Capability Map in JSON/CSV
* Visual BCM (optional – Excel/GoJS screenshot)
* Reflection (max 500 words)
* Improved prompt with annotations

## **✅ Sample Solutions by Industry**

### **🚛 Supply Chain & Logistics**

**Level 1 Capabilities**:

* Strategic Supply Chain Management (Tier 1)
* Transportation & Distribution (Tier 2)
* Inventory & Warehousing (Tier 2)
* Supplier Collaboration (Tier 2)

**Level 2 Capabilities**:

* Demand Forecasting
* Multi-modal Logistics Planning
* Just-in-Time Inventory Control
* Supplier Performance Tracking

### **🏭 Manufacturing Operations**

**Level 1 Capabilities**:

* Production Planning & Control (Tier 2)
* Asset Management (Tier 3)
* Product Lifecycle Management (Tier 1)
* Quality Assurance (Tier 2)

**Level 2 Capabilities**:

* Machine Maintenance Scheduling
* Lean Process Design
* Digital Twin Simulation
* Defect Root Cause Analysis

### **💼 Sales & Customer Engagement**

**Level 1 Capabilities**:

* Lead Management (Tier 2)
* Sales Operations & Enablement (Tier 2)
* Partner & Channel Strategy (Tier 1)

**Level 2 Capabilities**:

* Opportunity Scoring
* Sales Pipeline Optimization
* Incentive Program Design
* Partner Onboarding

### **🤝 Customer Experience & Service**

**Level 1 Capabilities**:

* Omnichannel Support Management (Tier 2)
* Voice of the Customer Insights (Tier 1)
* Service Quality Governance (Tier 1)

**Level 2 Capabilities**:

* Live Chat Optimization
* CSAT and NPS Analytics
* Root Cause Automation for Complaints
* Knowledge Article Curation

| **Industry** | **Level 1 Capabilities** | **Level 2 Capabilities** | **Tier Classification** | **Descriptions** |
| --- | --- | --- | --- | --- |
| **Supply Chain & Logistics** | ['Strategic Supply Chain Management', 'Transportation & Distribution', 'Inventory & Warehousing', 'Supplier Collaboration'] | ['Demand Forecasting', 'Multi-modal Logistics Planning', 'Just-in-Time Inventory Control', 'Supplier Performance Tracking'] | ['Tier 1', 'Tier 2', 'Tier 2', 'Tier 2'] | ['Align supply strategy with business goals and external risks', 'Optimize transportation routes, costs and delivery performance', 'Ensure optimal stock levels and efficient warehouse management', 'Build strong supplier networks and manage risk exposure'] |
| **Manufacturing Operations** | ['Production Planning & Control', 'Asset Management', 'Product Lifecycle Management', 'Quality Assurance'] | ['Machine Maintenance Scheduling', 'Lean Process Design', 'Digital Twin Simulation', 'Defect Root Cause Analysis'] | ['Tier 2', 'Tier 3', 'Tier 1', 'Tier 2'] | ['Schedule and control factory floor operations in real-time', 'Track and manage lifecycle of physical assets and equipment', 'Manage product design, compliance, and engineering changes', 'Implement continuous quality monitoring and process checks'] |
| **Sales & Customer Engagement** | ['Lead Management', 'Sales Operations & Enablement', 'Partner & Channel Strategy'] | ['Opportunity Scoring', 'Sales Pipeline Optimization', 'Incentive Program Design', 'Partner Onboarding'] | ['Tier 2', 'Tier 2', 'Tier 1'] | ['Capture, qualify, and convert leads into opportunities', 'Support reps with tools, data, and streamlined processes', 'Build and manage indirect sales channels and alliances'] |
| **Customer Experience & Service** | ['Omnichannel Support Management', 'Voice of the Customer Insights', 'Service Quality Governance'] | ['Live Chat Optimization', 'CSAT and NPS Analytics', 'Root Cause Automation for Complaints', 'Knowledge Article Curation'] | ['Tier 2', 'Tier 1', 'Tier 1'] | ['Deliver seamless service across chat, email, and voice', 'Collect and analyze customer feedback and sentiment', 'Enforce policies and audits for service performance'] |