# DDPM Exam 2 — Active Recall Flashcards (Modules 4 & 5)

This flashcard deck contains 60 high-yield active-recall questions and answers grouped by topic across Modules 4 and 5.

**Operational Parameters & Scope Rules**

- **Confirmed Operational Parameters**: 45 questions | 60-minute duration (3:30 PM–4:30 PM IST, Sun 16 Aug) | No negative marking (answer 100% of questions).

- **Material**: Cards based on missing local class sessions are marked as [externally supplemented; instructor-specific coverage unresolved].

## Module 4: Building Product Market Strategy

### Topic M04-T01: Marketing Strategy and Marketing Plan

#### Card 01

- **Q**: What were the three strategic growth options evaluated by Natureview Farm to reach 20 million in revenue by 2001, and what channel did each target?
- **A**:
- Option 1: Expand 8 oz SKU into conventional supermarkets in East and Central regions (6 SKUs).
- Option 2: Expand 32 oz SKU nationally into conventional supermarkets (4 SKUs).
- Option 3: Introduce 4 oz multipack into the existing natural foods channel.

#### Card 02

- **Q**: What was the financial structure of the slotting allowance required for Natureview Farm's Option 1 expansion into supermarkets?
- **A**: A one-time slotting fee of 10,000 per SKU per store chain, incurred only in the first year of introduction.

#### Card 03

- **Q**: In Natureview Farm's 1999 baseline income statement, what were the percentage breakdowns of Cost of Goods Sold (COGS), Gross Profit, Sales Expenses, and Marketing Expenses?
- **A**:
- Revenues: 13.0M (100%)
- COGS: 8.19M (63%)
- Gross Profit: 4.81M (37%)
- Sales Expenses: 1.56M (12%)
- Marketing Expenses: 390,000 (3%)

#### Card 04

- **Q**: What is the break-even volume formula when evaluating a new retail channel expansion involving slotting fees and fixed ad spend?
- **A**:

Break-Even Volume (Units) = (Fixed Marketing Expenses (Slotting Fees + Ad Spend)) / (Manufacturer Contribution Margin per Unit)

### Topic M04-T02: Lead Generation and Decoding Customer Journey

#### Card 05

- **Q**: What are the 5 dimensions of the SERVQUAL model (RATER), and how is the service quality gap calculated?

- **A**:
- 5 Dimensions: **Reliability**, **Assurance**, **Tangibles**, **Empathy**, **Responsiveness**.
- Service Quality Gap Formula: SERVQUAL Gap = Perception Score (P) - Expectation Score (E).

## Card 06

- **Q**: According to Morgan & Hunt's (1994) Commitment-Trust Theory of Relationship Marketing, what are the two central Key Mediating Variables (KMVs)?
- **A**: **Relationship Commitment** (enduring desire to maintain a valued relationship) and **Trust** (confidence in an exchange partner's reliability and integrity).

## Card 07

- **Q**: In Thaler's mental accounting framework, what is the core distinction between Acquisition Utility and Transaction Utility?
- **A**:
- Acquisition Utility: Perceived value of the product received relative to the price paid (U_acq = v(p) - p).
- Transaction Utility: Perceived deal quality or merit of the transaction relative to a reference price (U_trans = v(p^) - p, where p^ is reference price).

## Card 08

- **Q**: What are the four operational principles of mental accounting for framing financial outcomes?
- **A**:
- Segregate gains (multiple small positive events).
- Integrate losses (combine into a single lump sum).
- Integrate small losses with larger gains.
- Segregate small gains from large losses (silver lining effect).

## Topic M04-T03: Concept Testing and Product Development in B2C ( / )

## Card 09

- **Q**: What are the 5 response options on the standard Purchase Intent scale, and how is Top 2 Box (T2B) calculated?
- **A**:
- Scale: 5 = Definitely Would Buy, 4 = Probably Would Buy, 3 = Might/Might Not Buy, 2 = Probably Would Not Buy, 1 = Definitely Would Not Buy.
- T2B Formula: Top 2 Box % = % Definitely Buy + % Probably Buy.

## Card 10

- **Q**: What standard calibration discount factors (Nielsen BASES model) are applied to Top Box and Second Box survey intent to forecast actual trial?
- **A**:
- Top Box ("Definitely Buy"): Discounted to **80%** (0.80).
- Second Box ("Probably Buy"): Discounted to **30%** (0.30).
- Calibrated Trial Formula: (0.80 × Top Box %) + (0.30 × Second Box %).

## Card 11

- **Q**: What do the letters in the ATAR product adoption model stand for, and what is the market share formula?
- **A**:
- **A**wareness, **T**rial, **A**vailability, **R**epeat.
- Market Share Formula: Market Share % = A × T × A × R.

## Card 12

- **Q**: What are Kotler's Five Product Levels as illustrated in the Session 18 board diagram?
- **A**: Core benefit, Basic product, Expected product, Augmented product, Potential product.

# Topic M04-T04: Media Mix, Messaging, Packaging, and Bundling ( / )

## Card 13

- **Q**: What is the core operational distinction between Above-The-Line (ATL) and Below-The-Line (BTL) promotional channels?
- **A**:
- ATL: Mass media channels (TV, radio, print) aimed at building mass brand awareness and brand equity across broad segments.
- BTL: Targeted point-of-sale promotions, trade allowances, and direct marketing aimed at driving immediate conversion and sales push.

## Card 14

- **Q**: What are the three strategic business functions of packaging in product management?
- **A**:
- Functional & Protective: Preserving product integrity, safety, and shelf-life during transport.
- Informational & Regulatory: Communicating ingredient listings, nutritional facts, usage guidelines, regulatory markings, and barcodes.
- Perceptual & Branding ("Silent Salesman"): Differentiating the product visually and establishing brand positioning at point of sale.

## Card 15

- **Q**: What is the economic distinction between Pure Bundling and Mixed Bundling?
- **A**:
- Pure Bundling: Products are available exclusively as a bundled package; individual components cannot be purchased separately.
- Mixed Bundling: Products are available both individually and as a discounted bundle.

# Topic M04-T05: Managing Channel Partners and Affiliates ( — externally supplemented)

## Card 16

- **Q**: What is the structural difference between Vertical Channel Conflict and Horizontal Channel Conflict?
- **A**:
- Vertical Conflict: Conflict between different levels in the same channel (e.g., manufacturer selling D2C at prices below retail partner MSRP).
- Horizontal Conflict: Conflict between channel members at the same level (e.g., price war between two regional distributors).

## Card 17

- **Q**: What are the 5 bases of channel power established by French & Raven?
- **A**: Coercive power, Reward power, Legitimate power, Expert power, Referent power.

## Card 18

- **Q**: What are the 3 attribution models supported in Google Analytics 4 (GA4) following the mid-2023 deprecation of rules-based models?
- **A**:

- **Data-Driven Attribution (DDA)** (machine learning sequence evaluation).
- **Paid and Organic Last Click**.
- **Google Paid Channels Last Click**.

(Note: Legacy First Touch, Linear, Time-Decay, and rules-based Position-Based are RETIRED in GA4).

### Card 19

- **Q**: How does Adobe Marketo Measure allocate attribution credit in its U-Shaped multi-touch attribution model?
- **A**: Allocates **50%** credit to First Touch, **50%** credit to Lead Creation Touch, and **0%** credit to intermediary touches.

### Card 20

- **Q**: How does Adobe Marketo Measure allocate attribution credit in its W-Shaped multi-touch attribution model?
- **A**: Allocates **30%** credit to First Touch, **30%** to Lead Creation Touch, **30%** to Opportunity Creation Touch, and distributes the remaining **10%** equally across middle touches.

## Topic M04-T06: Pricing Models

### Card 21

- **Q**: What is the core flaw of Cost-Plus Pricing compared to Value-Based Pricing?
- **A**: Cost-plus pricing ignores customer Willingness-to-Pay (WTP) and price elasticity of demand, risking either underpricing high-value products or overpricing products with low market demand.

### Card 22

- **Q**: What defines First-Degree, Second-Degree, and Third-Degree Price Discrimination?
- **A**:
- First-Degree: Charging each individual customer their exact maximum WTP (personalized pricing).
- Second-Degree: Offering self-selecting quantity/tier options (e.g., ticket packages vs single game tickets).
- Third-Degree: Charging different prices to distinct identifiable market segments (e.g., student/senior discounts, stadium seating zones).

### Card 23

- **Q**: In the Springfield Nor'easters case, what were the total fixed annual operating expenses, and what percentage of respondents expected to spend 6–10 on concessions per game?
- **A**:
- Total Fixed Operating Expenses: **1,961,379** (Exhibit 1).
- Concession Expectation (6–10): **45%** of survey respondents (Exhibit 5 Q13).

### Card 24

- **Q**: What is the optimal price markup formula based on price elasticity of demand ($E_p$)?
- **A**:

Optimal Price = (MC) / (1 + (1 / $E_p$))

# Module 5: Defining User Experiences - Tools

## Topic M05-T01: AI in Customer Experience and Personalisation ( — externally supplemented)

### Card 25

- **Q**: What is the primary operational difference between Rule-Based Personalization and AI Personalization?

- **A**:
- Rule-Based: Static, manually configured logical rules based on predefined demographic or geographic segments.
- AI Personalization: Dynamic machine learning models evaluating real-time clickstreams, behavioral intent, context, and historical affinity to serve personalized content.

### Card 26

- **Q**: What is the difference between User-Based Collaborative Filtering and Item-Based Collaborative Filtering?
- **A**:
- User-Based: Recommends items preferred by users with similar historical rating patterns.
- Item-Based: Recommends items that are frequently co-purchased or co-viewed with the item currently being viewed.

### Card 27

- **Q**: What is the "cold-start problem" in recommendation systems, and how do Hybrid Recommendation Engines solve it?
- **A**:
- Cold-Start Problem: Collaborative filtering fails for new users or new items due to lack of historical interaction data.
- Hybrid Solution: Combines content-based filtering (using item metadata/attributes) with collaborative filtering to provide accurate recommendations before interaction history accumulates.

### Card 28

- **Q**: What role does Retrieval-Augmented Generation (RAG) play in enterprise GenAI customer support?
- **A**: RAG connects LLM conversational agents directly to verified internal enterprise knowledge bases, retrieving relevant context to generate accurate responses while preventing hallucinations.

## Topic M05-T02: Customer Engagement and Retention Strategies ( — externally supplemented)

### Card 29

- **Q**: What are the standard formulas for Customer Churn Rate (CR) and Customer Retention Rate (CRR)?
- **A**:

Customer Churn Rate (CR) = (Customers Lost During Period) / (Customers at Start of Period)

Customer Retention Rate (CRR) = (End Customers - New Customers) / (Start Customers) × 100

### Card 30

- **Q**: What is the standard simplified formula for Customer Lifetime Value (CLV)?
- **A**:

Customer Lifetime Value (CLV) = (ARPU × Gross Margin %) / (Monthly Churn Rate)

### Card 31

- **Q**: How does cohort retention curve analysis indicate whether a product has achieved true Product-Market Fit (PMF)?
- **A**: A healthy product retention curve flattens horizontally (forms an asymptote) over time, indicating a core group of retained users. A curve that continually trends downward to zero indicates lack of PMF.

### Card 32

- **Q**: What do R, F, and M stand for in RFM segmentation, and which cluster is the primary target for win-back campaigns?
- **A**:
- **R**ecency, **F**requency, **M**onetary value.
- Primary Win-Back Target: **At-Risk Customers** (Low Recency, High Frequency, High Monetary spend).

## Topic M05-T03: Cyber Risk Management and Trust ( — externally supplemented)

### Card 33

- **Q**: What are the 6 core functions of the NIST Cybersecurity Framework (NIST CSF v2.0)?
- **A**:
- **Govern (GV)** (new 6th function in v2.0)
- **Identify (ID)**
- **Protect (PR)**
- **Detect (DE)**
- **Respond (RS)**
- **Recover (RC)**

### Card 34

- **Q**: What is the explicit purpose of the "Govern" function newly added in NIST CSF v2.0?
- **A**: To establish and monitor the organization's cybersecurity risk strategy, policies, executive roles, regulatory compliance, and supply chain risk oversight.

### Card 35

- **Q**: What are the three core architectural principles of Zero Trust Architecture (NIST SP 800-207)?
- **A**:
- **Explicit Verification** (always authenticate and authorize based on all available data points).
- **Least Privilege Access** (limit user access with Just-In-Time and Just-Enough-Access policies).
- **Assume Breach** (minimize blast radius through micro-segmentation and continuous monitoring).

### Card 36

- **Q**: What is the core philosophy of Privacy by Design (PbD)?
- **A**: Privacy must be proactively built into software products as the default setting across the entire engineering lifecycle, rather than added reactively after launch.

## Topic M05-T04: Tableau Session ( — externally supplemented)

### Card 37

- **Q**: What is the functional difference between Dimensions and Measures in Tableau?
- **A**:
- Dimensions: Categorical, qualitative fields that slice data and set the level of detail in a view.
- Measures: Numerical, quantitative fields that are aggregated when placed in a view (SUM, AVG, COUNT).

### Card 38

- **Q**: What do Blue pills and Green pills represent in Tableau?
- **A**:
- Blue Pills: **Discrete** fields (create distinct column/row headers).
- Green Pills: **Continuous** fields (create continuous quantitative axes).

### Card 39

- **Q**: What are the three types of Level of Detail (LOD) expressions in Tableau, and how do they function?
- **A**:
- FIXED: Computes aggregate at specified dimension granularity, ignoring view dimensions.

- INCLUDE: Computes aggregate including specified dimensions in addition to view dimensions.
- EXCLUDE: Computes aggregate excluding specified view dimensions.

## Card 40

- **Q**: In Tableau's Order of Operations, where do FIXED LODs execute relative to Dimension Filters and Context Filters?
- **A**: FIXED LODs execute **AFTER Context Filters** but **BEFORE Dimension Filters**. (INCLUDE/EXCLUDE LODs execute after Dimension Filters).