PM Interviews  
Marketing Interviews  
More Practice

MY INTERVIEW PREP BOOKS ON AMAZON
Email lewis@impactinterview.com to get your copy.
First Half
Interview Process
Analytical
Marketing

Second Half
Product Design
Technical
Metrics & A/B Testing
Overview of Tech Roles
Top roles for tech-bound MBAs:

- Product Management
- Program Management
- Product Marketing
- Marketing Analytics
- Finance
- Operations
- Sales
- Business Development
- Vendor Management
- Strategy

Top Roles for Tech-Bound MBAs
What prod. managers typically do

Understand the customer
Develop requirements
Prioritize resources
Serve as launch lead
Collect feedback
WHAT PROD. MKTG. TYPICALLY DOES

- Develop positioning
- Create mktg. deliverables
- Run mktg. campaigns
- Sales training & demos
- Collect feedback
What prod. marketers typically do
Case Questions
<table>
<thead>
<tr>
<th>Job Type</th>
<th>PM Question</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance</td>
<td>What is the lifetime value of an Amazon Prime customer?</td>
<td>Amazon</td>
</tr>
<tr>
<td>Analytics</td>
<td>What top metrics would you track for the Tinder online dating app?</td>
<td>Tinder</td>
</tr>
<tr>
<td>Product manager</td>
<td>Improve the Disneyland user experience, relevant to a Google product.</td>
<td>Google</td>
</tr>
<tr>
<td>Operations</td>
<td>Describe how Apple’s supply chain works. What challenges does Apple face on a day-to-day basis?</td>
<td>Apple</td>
</tr>
<tr>
<td>Marketing</td>
<td>Create a marketing campaign for Microsoft Office 365.</td>
<td>Microsoft</td>
</tr>
</tbody>
</table>
For [target end user]
Who wants/needs [compelling reason to buy]
The [product name] is a [product category] That provides [key benefit].
Unlike [main competitor],
The [product name] [key differentiation]

CASE QUESTIONS

Analyze profitability
Critique a product
Design or improve a new product
Solve a technical problem
Price a new product
Price an existing product

Calculate lifetime value
Define metrics for a product
Discuss business strategy
Enter a new market
Develop a product vision
Endure a stress test
Analytical
Lifetime Value FRAMEWORK

Average Contribution Per Sale → Sales Per Year → Average Length of Customer
Exercise, Customer Lifetime Value
Just ask
Focus group of 10
What’s 65% of 21,000?
Discounting cash flows

\[ DCF = \frac{CF_1}{(1 + r)^1} + \frac{CF_2}{(1 + r)^2} + \ldots + \frac{CF_n}{(1 + r)^n} \]
Product Design
Design an new iPad app for Google spreadsheet?
Design a new personal finance app?
How would you design a better smoke detector?
CIRCLES Method

2. Identify customer → Personas
3. Report customer needs → as, I want so that
4. Cut, through prioritization → ROI estimate?
5. List solutions
6. Evaluate trade-offs → thoughtful, analytical, objective
7. Summarize recommendation → What, recap, why vs. others
Uninspired brainstorming
Superficial customer empathy
Exercise, Brainstorming
102 WAYS TO EMPLOY YOUR PET
by Pirates of the Coffee Bean

INNOVATION IS A VOLUME GAME
Off the wall is okay

Technologists

54 Dog employed as Google StreetView or Google Earth cameraman

55 Dog blogger / live streamer running around with a video camera on its head

56 Fish as a random number generator - every few seconds it swims in a new direction and generates a new random number

57 iPhone charger powered by a hamster or by any other pet running around a lot (via a sensor)
Ideas build on top of each other.

Doggie gym trainers:

28 Dogs as running partners next to you on the treadmill (they’ll never get tired)
29 Dogs as trainers, doing tugs-of-war for resistance training
30 Dogs as weight-lifting weights (lift a heavy dog instead of barbells)
31 Dogs as golf ball collectors at the driving range
32 Dogs as tennis ball collectors at the tennis court
33 Dogs as tennis trainers, holding the racket with their mouths and hitting balls back
Event planning specialists

59. Dogs as wedding videographer’s assistants, covering unusual angles and candid shots
60. Dog as a prop in wedding photo booths
61. Geese hired to fly in formation for celebrations (instead of planes)
62. Pets in clown or other outfits as entertainment for children’s parties

Rental accessories

USE CATEGORIES AS PROMPTS
Alsways pause to brainstorm
Rant about a problem related to household cleaning
em·pa·thy

noun
the ability to understand and share the feelings of another.

PRACTICE OF CUSTOMER EMPATHY
RANTING HELPS US FEEL
Metrics
<table>
<thead>
<tr>
<th>Metric</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify</td>
<td>You’re the PM for ___. What metrics would you track?</td>
</tr>
<tr>
<td>Prioritize</td>
<td>What’s the most important metric?</td>
</tr>
<tr>
<td>Diagnose</td>
<td>Let’s say ___ metric went down X% week-over-week. How would you diagnose?</td>
</tr>
<tr>
<td>Recommend</td>
<td>How would you fix?</td>
</tr>
<tr>
<td>Other</td>
<td>Evaluate the data. What conclusions can you draw? And what actions do you recommend?</td>
</tr>
</tbody>
</table>
Identify Metrics
You’re the PM for ___. What metrics would you track?
### Amazon’s AARM™ Metrics

<table>
<thead>
<tr>
<th>Acquisition</th>
<th>Activation</th>
<th>Retention</th>
<th>Monetization</th>
</tr>
</thead>
</table>
| • Daily sessions  
• CPA  
• CPC  
• CPM  
• Mobile app D/L  
• Top search engine terms leading to website  
• Mailing list: CTR, open rate, conv rate | • New registered users  
• Mobile app opens  
• Number of searches on website or app  
• New cart started  
• User information given (address, credit card)  
• New customers w/ purchase | • Conversion rate  
• Recommendation engine conversion rate  
• Cart abandonment  
• Cart size  
• Visits from registered users per month | • Revenue per customer  
• Lapsed customers  
• Purchases per year  
• Revenue per click  
• Cost of sale (ad spend / revenue)  
• CLV  
• Cost of shipping |

- **Acquisition**
  - Daily sessions
  - CPA
  - CPC
  - CPM
  - Mobile app D/L
  - Top search engine terms leading to website
  - Mailing list: CTR, open rate, conversion rate

- **Activation**
  - New registered users
  - Mobile app opens
  - Number of searches on website or app
  - New cart started
  - User information given (address, credit card)
  - New customers w/ purchase

- **Retention**
  - Conversion rate
  - Recommendation engine conversion rate
  - Cart abandonment
  - Cart size
  - Visits from registered users per month

- **Monetization**
  - Revenue per customer
  - Lapsed customers
  - Purchases per year
  - Revenue per click
  - Cost of sale (ad spend / revenue)
  - CLV
  - Cost of shipping
### Other

- Avg listing position on the Google search results page
- COGS
- Shipping time
- Stockouts
- Returns
- Checkout errors
- # of reviews left by customers
- Number of users that each customer refers (viral coefficient)
- Market share
- Customer engagement on social media
- Net or gross margin
Acquisition
• # of lazy registrations

Activation
• # of people that complete signup

Retention
• Profile completeness
• # of users posted
• # of posts
• # of invites sent

Monetization
• ARPU
• ARPPU
• ARPDAU
• LTV
• Conversion rate

AARM™ METRICS
Prioritize Metrics
What’s the most important metric?
## My Priorities

For [target end user]
Who wants/needs [compelling reason to buy]
The **product name** is a **product category**
That provides **key benefit**.
Unlike **main competitor**,
The **product name** **key differentiation**

<table>
<thead>
<tr>
<th>Metric Name</th>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cart abandonment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visits from registered users per month</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lapsed customers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchases per year</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Diagnose a Metric
Let’s say ____ metric went down X% week-over-week.

How would you diagnose?
Issue Tree Example: Profitability

Profit

Revenue

Costs

Price

Quantity

Fixed Costs

Variable Costs

ISSUE TREE EXAMPLE
Ex. Issue Tree, Amazon Ads

For [target end user]

Who wants/needs [compelling reason to buy]

The [product name] is a [product category]

That provides [key benefit].

Unlike [main competitor],

The [product name] [key differentiation]

---

Weekly Ad Revenue

# of Ads Shown per Week

Revenue per Ad

---

Revenue per Ad

---

EX. ISSUE TREE, AMAZON ADS
Issue Tree: Amazon’s Mobile Ad Revenue

Weekly Ad Revenue

- # of Ads Shown per Week
- Revenue per Ad

- Users per Week
- Ads per Weekly User
- Price per ad
- Fill Rate

- Users
- % Weekly Active Users
- Ad Units per PV
- Pageviews per User

- Pages per Minute
- Minutes Spent per Weekly Active User

Revenue per Ad
Recommend a Solution
A/B Testing
LinkedIn is testing a new upload feature...
Technical
There is a building of 100 floors. If an egg drops from the Nth floor or above it will break. If it’s dropped from any floor below, it will not break. You’re given 2 eggs.

Find N, while minimizing drops for the worse case.
1st try: Start from the 1st floor
2\textsuperscript{nd} TRY: PARTITION THE DROPS
We want the \# of drops for the 1\textsuperscript{st} egg to be similar to \# of drops for the 2\textsuperscript{nd} egg. i.e. minimize the sum.

With each 1\textsuperscript{st} egg drop, there are fewer 1\textsuperscript{st} egg drops left. i.e. if the drop does not break, we need to jump up just (n-1) floors each time.

This can be expressed in a summation:

- \( n + (n-1) + (n-2) + \ldots + 1 \geq 100 \)
- \( n(n+1)/2 \geq 100 \)
- Solve for \( n = 14 \).
- 14 is also the worst case \# of drops (at floor 98)
<table>
<thead>
<tr>
<th>Drop for Egg A</th>
<th>Floor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>2</td>
<td>27</td>
</tr>
<tr>
<td>3</td>
<td>39</td>
</tr>
<tr>
<td>4</td>
<td>50</td>
</tr>
<tr>
<td>5</td>
<td>60</td>
</tr>
<tr>
<td>6</td>
<td>69</td>
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<td>7</td>
<td>77</td>
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<tr>
<td>8</td>
<td>84</td>
</tr>
<tr>
<td>9</td>
<td>90</td>
</tr>
<tr>
<td>10</td>
<td>95</td>
</tr>
<tr>
<td>11</td>
<td>99</td>
</tr>
<tr>
<td>12</td>
<td>100</td>
</tr>
</tbody>
</table>
Most don’t ask technical questions.
Technical trivia
Algorithms and data structures
System design
SQL queries
Understand what is being asked
Work through the simple base case
Talk aloud
Write the technical solution, if necessary
Review the code

APPROACH TO TECHNICAL Q’S
Marketing Case Questions
Create a positioning statement
Develop a marketing campaign
Price a new product
Change the price of a current product
Deal with declining sales
Launch a new product
Defend against the competition

Compete against generic competition
Critique a marketing effort
Critique advertising
Deal with PR disasters
Get analytical: estimations
Get analytical: ROI calculations
Strategize: CEO-level issues
Developing a Marketing Plan
MARKETING FRAMEWORK

Business Goal
Marketing Goal
Segment
Target
Positioning
Product
Place
Promotion
Price

Strategy
Tactics
Business Goals

Marketing Goal

- Segment
- Target
- Positioning

Product
Place
Promotion
Price

BUSINESS GOALS
Increase US market share of sugar-free energy drinks by 300 basis points among men and women between 25 to 34 within the next 12 months.
Possible Business Goals

Profits / Revenues
Share / Adoption

POSSIBLE BUSINESS GOALS
Marketing Goals

- Awareness
- Interest
- Trial
- Purchase
SEGMENTATION & TARGETING
Subway’s Perceptual Map

- **Quick Food**
  - Subway
  - Wendy’s
  - Burger King
  - McDonald’s

- **Healthy**

PERCEPTUAL MAP
Perceptual Map for Apple Watch
P-MAP: JEWELRY+ FASHION

- Apple Watch 1
  - Traditional watches
  - Bracelets
Fitness Tracker

- Fitbit
- Garmin
- Apple Watch

Price

P-MAP: Fitness + Price
Smartwatch

Optimized for Apple Ecosystem

• Apple Watch

• Android Wear

P-MAP: S-WATCH + APPLE ECOSYSTEM
Game Improvement Watch

- Apple Watch 5
- Garmin

Optimized for Apple Ecosystem

P-MAP: GAME IMPROVEMENT
For [target end user]
Who wants/needs [compelling reason to buy]
The [product name] is a [product category]
That provides [key benefit].
Unlike [main competitor],
The [product name] [key differentiation]
For first-time computer buyers, the Samsung Chromebook is as sexy as the MacBook Air, but costs 80 percent less.
<table>
<thead>
<tr>
<th>Memorable?</th>
<th>For first-time computer buyers, the Samsung Chromebook is as sexy as the MacBook Air, but costs 80 percent less.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unique?</td>
<td></td>
</tr>
<tr>
<td>Believable?</td>
<td></td>
</tr>
<tr>
<td>Actionable?</td>
<td></td>
</tr>
</tbody>
</table>
EXERCISE, POSITIONING STATEMENT

...
Business Goal → Marketing Goal

- Segment
- Target
- Positioning

Product → Place → Promotion → Price

F O U R  P ’ S
EXERCISE, PROMOTIONAL TACTICS
The brick walls are there for a reason. The brick walls are not there to keep us out. The brick walls are a chance to show how badly we want something. They stop other people. Those who don’t want it badly enough.

*Randy Pausch, The Last Lecture*

lewis@impactinterview.com