Essential Business Cases — CED-Aligned Companion

This file maps every business case named in the official AP® Business with Personal Finance Course and Exam Description (College Board, Fall 2026 edition) to the AP framework topic it illustrates, and provides original analysis frameworks plus discussion questions for each.

Why this file exists. The CED names specific real-company business cases that students are expected to engage with during the course (one per most content topics). The full case materials themselves live on **AP Classroom** (College Board's instructor portal) — they're not reproduced in any textbook, including this one. This file's job is to name every required case, identify the topic and AP-framework concepts it illustrates, and give you original analysis prompts so you can engage with each case using whatever publicly available material you can find about that company.

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How to use this file. For each case below, you get: (1) the company name, (2) the AP topic and learning objective it's mapped to in the CED, (3) what the company does based on publicly known information, (4) the concepts the case illustrates per the AP framework, (5) "going in" prep bullets so you know what to look for before engaging with the case, (6) further reading URLs, and (7) 6 original AP-style discussion questions with worked answer sketches.

If you have access to AP Classroom (most teachers do; students often access it through their teacher), use the AP-provided case as the primary source. Use this file as a study companion for working through the case — and if you don't have AP Classroom access, the company information here plus original questions still let you engage with the topic.

How the 26 cases break down

The CED names 26 cases across 23 of the course's 31 topics — three topics (3.7, 4.1, and 4.4) carry two named cases each. The remaining 8 topics (Business Ethics, Organization/Roles, Accounting fundamentals, and all of Units 3-Pt-1 and Unit 5) are taught through personal-finance standards integration rather than named real-company cases.

Unit	Topics with a CED-named case	Topics without
Unit 1	1.1, 1.2, 1.3, 1.4, 1.5, 1.8	1.6, 1.7
Unit 2	2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7	—
Unit 3 (Pt 1)	—	3.1, 3.2
Unit 3 (Pt 2)	3.4, 3.5, 3.6, 3.7 (×2), 3.8, 3.9	3.3
Unit 4	4.1 (×2), 4.2, 4.3, 4.4 (×2)	—
Unit 5	—	5.1, 5.2, 5.3
Total	**23 topics · 26 cases**	**8 topics**

Three topics carry two named cases each: Topic 3.7 (DCH and DK Coffee Lab, Part 3), Topic 4.1 (Assort Health and Canva), and Topic 4.4 (Crepes & Waffles and Square Meal Feeds).

UNIT 1 — Businesses, Competition, and New Ideas

Topic 1.1 · Bombas

Topic: What Is a Business?

What the company does (public information). Bombas is a U.S. apparel company founded in 2013 that sells socks, t-shirts, and underwear. Its publicly stated mission is the "buy one, give one" model — for each item sold, the company donates one item to people experiencing homelessness, addressing what its founders identified as a high-demand, frequently-requested item at homeless shelters.

Why this case fits Topic 1.1. The case demonstrates the foundational AP concept that **a business is an organization that produces or distributes goods/services in exchange for value, and the definition includes both for-profit and mission-driven businesses.** Bombas pursues profit while also pursuing a social mission — making it a clear illustration of the "social enterprise" subcategory and a useful counterexample to the misconception that all businesses exist solely to maximize profit.

AP-framework concepts the case illustrates.

- Business definition (EK 1.1.A): producing/distributing goods or services
- Customers vs. consumers (EK 1.1.A): retail buyers vs. donation recipients — different relationships
- Value creation vs. value capture (EK 1.1.B): captures value via retail pricing; creates value for both paying customers and donation recipients
- Profit-seeking vs. social enterprise: both at once

Going in — prep before you engage with the case.

- The "buy one, give one" model is the founding identity; understand the math of how it affects unit economics — every donated item is a direct cost, so pricing must absorb it
- The product category (socks/apparel) normally has very thin margins; understand how a clearly articulated mission can support a premium price that would otherwise be indefensible
- Bombas operates in a market with both retail customers (buyers) and donation recipients; know the AP framework's distinction between customer (who pays) and consumer (who uses) before you read — those are different groups here

Further reading.

- bombas.com (company website, mission and product info)
- en.wikipedia.org/wiki/Bombas_(company)
- sharktank.fandom.com/wiki/Bombas (Shark Tank pitch details, public record)
- inc.com — search "Bombas founders interview" for accessible founder coverage
- URLs verified at time of writing; if a link breaks, search by company name.

Discussion questions (original).

1. Bombas's per-pair retail price is materially higher than mass-market sock brands. How does the company's social mission affect its ability to charge a premium, and what would happen to value capture if the mission were removed?
2. Identify Bombas's customers and consumers. Are they the same group? Use the AP framework's distinction.
3. If Bombas chose to scale its donation program, what risks does that create for value capture? Which is harder to scale — the value-creation side or the value-capture side?
4. **Calculation/data question.** Assume Bombas sells a pair of socks for $15 and the donated pair costs $4 to produce and ship. If COGS for the sold pair is $5 (before the donation cost), what is the gross margin per transaction? How does the donation obligation change the effective gross margin compared to a traditional sock brand at the same $15 retail price?
5. **Decision/recommendation question.** Bombas is considering expanding into athletic shorts, which have similar unit economics to socks. Should the company extend the "buy one, give one" model to shorts, or should it sell shorts at a normal margin and use the extra profit to fund additional sock donations? Pick one path and justify using value-creation and value-capture logic.
6. **Cross-framework synthesis.** Apply the PESTEL framework (Topic 1.3) to Bombas. Identify one social factor and one economic factor that either strengthen or threaten the mission-driven pricing premium over the next five years.

Answer sketches

1. The mission gives buyers a reason to accept the premium — they are purchasing tangible social impact alongside the product, reducing price sensitivity. Without the mission, Bombas competes on sock quality alone against Darn Tough, Smartwool, and Nike, which is a much harder value proposition at the same price point. Value capture would likely need to contract (lower prices) or the company would need to shift its differentiation entirely to product quality.

2. The customer is the retail buyer who pays $15 for a pair of socks. The consumer (end user) is the same retail buyer for their own pair — but the donation recipient is also a consumer (they use the donated item) without being a customer at all. This is a clean two-consumer/one-customer structure that the AP framework captures precisely.

3. Scaling the donation program means donating more units, which increases direct costs proportionally unless the donation item's unit cost falls at scale. Value capture risk: if COGS rises faster than revenue as the program scales, margins compress. The value-creation side (making socks) scales with manufacturing; the value-capture side (justifying the premium) is harder because the premium depends on perceived mission authenticity, which can erode if the brand is seen as commercializing its giving.

4. Traditional sock brand gross margin at $15 retail with $5 COGS = ($15 - $5) / $15 = 66.7%. Bombas effective COGS = $5 + $4 (donated pair cost) = $9 per transaction. Gross margin = ($15 - $9) / $15 = 40%. The donation obligation cuts the gross margin by roughly 27 percentage points. A strong answer notes that Bombas must compensate via higher volume or operational efficiency to hit the same profitability target as a conventional brand.

5. A strong recommendation to extend the model to shorts argues: (a) brand consistency — a partial mission signals inauthenticity; (b) the shorts buyer is the same customer attracted by the mission; (c) the donation supply chain is already built. A strong recommendation against argues: (a) shorts donations are harder to scale to shelters vs. socks; (b) the margin hit is larger on a higher-priced item; (c) keeping shorts at full margin funds more sock donations than a diluted shorts program would. Either is defensible if the trade-off logic is explicit.

6. Social factor: growing consumer preference for purpose-driven brands (ESG consciousness, Gen Z purchasing behavior) strengthens the premium — the mission becomes a stronger buying signal over time. Economic factor: recessions shift consumer spending toward value brands — mission premiums become harder to sustain when budgets tighten, threatening volume without a corresponding price reduction strategy. A complete answer identifies both the direction and the mechanism for each factor.

Topic 1.2 · Incredible Health

Topic: Markets and Competitive Advantage

What the company does (public information). Incredible Health is a U.S. healthcare staffing platform launched in 2017 that matches nurses with hospital employers. The company operates as a marketplace: hospitals subscribe to the platform; nurses use it free of charge to find positions.

Why this case fits Topic 1.2. The healthcare-staffing market has multiple traditional players (staffing agencies, hospital HR departments, recruiting firms). Incredible Health competes by offering a different model (employer-pays, platform-based, AI-matched) that creates a structural competitive advantage in a market where the talent supply is constrained.

AP-framework concepts the case illustrates.

- Market structure: imperfect competition in healthcare staffing
- Competitive advantage (EK 1.2.B): platform model + AI matching + employer-paid model = differentiation
- Barriers to entry: network effects (more hospitals attract more nurses, which attracts more hospitals)
- Two-sided market dynamics

Going in — prep before you engage with the case.

- Understand the two-sided market structure before reading: hospitals are the paying customer; nurses are the supply side who use the platform free. Know how this affects who the company's marketing targets and where competitive advantage is built.
- The nursing shortage in the U.S. is structural, not cyclical — it is the single market condition that makes Incredible Health's supply-side (nurse) acquisition so valuable. Know this context.
- "Competitive advantage" in the AP framework has two main forms — cost-based and differentiation-based. Be ready to classify which one this platform uses, and why network effects make it self-reinforcing.

Further reading.

- incrediblehealth.com (company website)
- techcrunch.com — search "Incredible Health funding" for accessible funding and company profile articles
- forbes.com — search "Incredible Health" for business profile coverage
- linkedin.com/company/incredible-health — public company LinkedIn profile with employee count and description
- URLs verified at time of writing; if a link breaks, search by company name.

Discussion questions (original).

1. Identify Incredible Health's competitive advantage. Is it cost-based or differentiation-based, and what specifically does it protect against new competitors?

2. The platform is free to nurses but paid by hospitals. Why does this pricing structure make sense for a two-sided marketplace? What would happen if Incredible Health charged nurses instead?
3. What barriers to entry does Incredible Health benefit from now that it didn't enjoy at launch? How does this connect to first-mover advantage in platform businesses?
4. **Calculation/data question.** A traditional staffing agency charges hospitals a placement fee equal to 20% of a nurse's first-year salary ($75,000 average). Incredible Health charges hospitals a flat annual subscription of $30,000 per year, covering unlimited hires. At what number of annual hires does the subscription become cheaper for a hospital than using a traditional agency? Show the math.
5. **Decision/recommendation question.** Incredible Health is deciding whether to expand from nurses into physician staffing. Physicians have higher salaries, longer search times, and more credentialing complexity. Should the company expand now, wait until the nursing business is dominant, or never enter physician staffing? Pick one and justify using competitive advantage and barriers-to-entry logic.
6. **Cross-framework synthesis.** Apply the PESTEL framework (Topic 1.3) to Incredible Health. Which two PESTEL factors most directly shape the size and growth of the healthcare-staffing market the company operates in? Explain the mechanism for each.

Answer sketches

1. Incredible Health's advantage is differentiation — it offers a fundamentally different model (platform + AI matching + employer-pays) rather than competing on price alone. The protection comes primarily from network effects: as more hospitals join, the platform becomes more attractive to nurses, which in turn makes it more valuable to hospitals. A new entrant faces the classic cold-start problem of needing simultaneous supply and demand.

2. In a two-sided market, the side with the most price sensitivity gets the free or subsidized side. Nurses face high search costs and career uncertainty — making the platform free lowers their barrier to adoption and maximizes the supply pool. Hospitals have budget and are making high-value hiring decisions; they can and will pay for better access to quality candidates. Charging nurses would reduce supply-side participation, undermining the platform's value to hospitals.

3. At launch, Incredible Health had no network effects — cold-start with no hospitals and no nurses. Now it benefits from: (a) network effects (supply/demand flywheel), (b) data advantages (AI matching improves with more successful placements), (c) brand recognition in the nursing community. These are barriers a new entrant faces but Incredible Health did not when it started.

4. Traditional agency cost per hire: 20% × $75,000 = $15,000. Subscription: $30,000/year. Break-even: $30,000 / $15,000 = 2 hires per year. If a hospital makes 2 or fewer nurse hires per year, the traditional agency is cheaper. At 3+ hires, the subscription wins. Most hospitals make far more than 2 hires per year, so the subscription model is almost always cheaper at meaningful scale — a key part of the value proposition.

5. A strong "expand now" argument: physician staffing has the same market inefficiency; Incredible Health's AI platform and hospital relationships transfer; first-mover advantage matters in physicians as it did in nurses. A strong "wait" argument: the nursing platform's moat is not yet fully built; diverting resources risks both markets. A strong "never" argument: physician credentialing complexity breaks the platform's current matching model. All three are defensible; the strongest answers use competitive advantage criteria explicitly.

6. Political/Legal: healthcare regulation (licensing, credentialing, Stark Law, scope-of-practice rules) directly sets the rules of the staffing market — regulatory changes can expand or restrict who can be placed and how. Economic: hospital budgets are tied to Medicare/Medicaid reimbursement rates and insurance margins — when hospital finances tighten, staffing budgets are cut first, reducing willingness to pay for the subscription. Both factors shape market size and Incredible Health's revenue directly.

Topic 1.3 · Corley Plumbing

Topic: PESTEL Factors and the Business Environment

What the company does (public information). Corley Plumbing is a service business in the residential/commercial plumbing industry. As a small or mid-sized service business, it operates in a market shaped heavily by external factors — local economic conditions, building codes, water-conservation regulations, technology shifts (smart-home plumbing fixtures), and labor availability.

Why this case fits Topic 1.3. A local service business is an ideal lens for PESTEL because every letter affects it directly: political (local government licensing), economic (interest rates affect new-construction demand), social (multi-generational households shift fixture demand), technological (leak detection tech), environmental (drought regulations), legal (plumbing code changes).

AP-framework concepts the case illustrates.

- All six PESTEL letters in a single business (EK 1.3.A)
- How small businesses face external factors that larger competitors can absorb more easily
- The cascading effect of regulatory change on small business operations

Going in — prep before you engage with the case.

- Know all six PESTEL letters and a concrete example for each before you read — you will be expected to classify factors, not just list them. Ambiguous factors (e.g., "green building codes" — is that Environmental or Legal?) should be assigned to the most direct driver.
- Plumbing demand has two very different revenue streams: new construction (highly sensitive to interest rates and permit activity) and maintenance/repair (much more recession-resistant). Know the difference — this drives the Economic analysis.
- Small local service businesses have less capacity to absorb sudden external changes than large chains. The PESTEL framework applies equally to both, but the strategic response options differ significantly by firm size.

Further reading.

- Specific verified URL not available for Corley Plumbing; recommend searching "Corley Plumbing [city/state]" to find current public information about this specific business.
- For PESTEL applied to trade businesses generally, search "plumbing industry outlook IBISWorld" or "plumbing contractor PESTEL analysis" for accessible industry reports.
- sba.gov — the Small Business Administration publishes free industry-level reports relevant to construction trades.
- URLs verified at time of writing; if a link breaks, search by company name.

Discussion questions (original).

1. Apply the PESTEL framework to Corley Plumbing. Identify one specific factor for each letter that would meaningfully change the business's strategy if it changed.
2. Which PESTEL factor is most likely to have a permanent (not cyclical) impact on plumbing service businesses over the next decade? Justify.
3. How does Corley Plumbing's size affect its ability to respond to PESTEL changes compared to a national plumbing chain? Use evidence from the framework.

4. **Calculation/data question.** Corley Plumbing does 60% of its revenue from new-construction contracts and 40% from repair/maintenance. If new-construction demand falls 40% due to rising interest rates (an Economic factor), what percentage of total revenue does the company lose, assuming maintenance revenue holds flat? What does this number reveal about the company's exposure to the Economic factor?
5. **Decision/recommendation question.** A new state regulation (Legal factor) requires all plumbers in Corley's state to obtain an additional $2,000 certification by year-end. Corley has 8 plumbers. Should the company pay for all 8 certifications immediately, phase them in, or try to hire pre-certified plumbers instead? Recommend one approach and connect it to PESTEL strategic response logic.
6. **Cross-framework synthesis.** Use Porter's Five Forces (Topic 4.4) to explain how a Legal factor — specifically, state licensing requirements — simultaneously affects the threat of new entrants and competitive rivalry in the local plumbing market. How do these two forces interact?

Answer sketches

1. Strong answers list a plausible, specific factor for each letter. Examples: Political = municipal permit approval delays affecting new-construction timelines; Economic = Federal Reserve rate hikes reducing new home construction; Social = aging-in-place trend increasing demand for accessibility fixture retrofits; Technological = smart leak detection sensors creating a new service category; Environmental = drought-area water restrictions requiring low-flow fixture upgrades; Legal = state backflow-prevention certification requirement adding cost per plumber per year.

2. Technological is the strongest "permanent" answer: smart home water systems, pipe inspection cameras, and automated leak detection are changing what a plumber needs to know and what services command premium pricing — and that shift is not reversible. Environmental is a strong second: long-term water scarcity in western states will permanently restructure fixture standards. Economic factors (interest rates) are typically cyclical rather than permanent.

3. A national plumbing chain can absorb a PESTEL shift through: cross-regional revenue diversification, bulk purchasing power to absorb cost increases, a dedicated compliance team for regulatory changes, and capital reserves for technology upgrades. Corley, as a small local business, faces each PESTEL factor with fewer cushions — regulatory compliance costs are a larger percentage of revenue, and a single bad Economic cycle can threaten survival.

4. Revenue loss = 60% (new construction share) × 40% (demand decline) = 24% of total revenue lost. With maintenance flat, total revenue falls from 100% to 76%. This reveals that Corley's revenue is significantly exposed to the Economic factor — nearly a quarter of total revenue is at risk from a single macro shift. A diversified 50/50 revenue mix would reduce that exposure to 20%.

5. The strongest recommendation is to pay for all 8 certifications immediately: (a) non-compliance by the deadline risks the license to operate — an existential Legal risk; (b) $16,000 total is a one-time fixed cost spread over the certification's useful life; (c) hiring pre-certified plumbers takes time and may cost more in wages. Phasing in creates compliance risk for the non-certified plumbers in the interim period.

6. State licensing requirements raise the barrier to entry for new plumbing businesses — a competitor must invest time and money in licensing before operating, reducing the threat of new entrants. Simultaneously, licensing limits the total pool of licensed competitors in a market, which can reduce competitive rivalry (fewer firms competing for the same jobs). These two forces work together: higher entry barriers mean fewer entrants, which means less rivalry. The Legal factor thus creates a structural competitive benefit for existing licensed businesses like Corley.

Topic 1.4 · Malama ia Floral Design

Topic: How Do Business Ideas Originate?

What the company does (public information). Malama ia Floral Design is a Hawaii-based floral and event design business. Its founder identified a market opportunity within the Hawaiian wedding/events industry, particularly around incorporating native plants, cultural traditions, and sustainable practices into floral arrangements — a niche underserved by mainstream floral providers.

Why this case fits Topic 1.4. The case illustrates how business ideas originate from **observation** (noticing an unmet need in a specific community/market) and **personal insight** (the founder's connection to the cultural context). It also illustrates the difference between identifying a problem and developing a viable solution.

AP-framework concepts the case illustrates.

- Idea generation methods (EK 1.4.A): observing, interviewing, surveying, research, experimentation
- Identifying a customer's problem, need, or want (EK 1.4.B)
- Problem-solution fit
- Niche differentiation as a startup advantage

Going in — prep before you engage with the case.

- The AP framework identifies several distinct methods of idea generation — observation, interviews, surveys, research, and experimentation. Know all five and understand which one is most likely to surface a culturally-specific insight (hint: observation and interviews dominate cultural-niche businesses).
- "Problem-solution fit" is the early-stage test: does the solution actually address the problem the founder identified? Many businesses solve the wrong problem because the founder assumed rather than validated. Look for evidence of validation in the case.
- Niche businesses often appear too small but can be defensible precisely because the niche requires cultural knowledge that outsiders cannot easily acquire. This connects to differentiation-based competitive advantage from Topic 1.2.

Further reading.

- Specific verified URL not available for Malama ia Floral Design; recommend searching "Malama ia Floral Design Hawaii" to find current public information.
- hawaiibusiness.com — Hawaii Business Magazine covers local small businesses and is publicly accessible; search the company name.
- For idea generation frameworks generally, search "AP Business idea origination problem-solution fit" for accessible study explainers.
- URLs verified at time of writing; if a link breaks, search by company name.

Discussion questions (original).

1. What customer problem, need, or want did Malama ia Floral Design likely identify, and what specific evidence might the founder have collected to validate it? Apply the framework verbs (observe, interview, survey).
2. Why might a niche-cultural floral business be more defensible than a general floral business? Connect to competitive advantage from Topic 1.2.

3. Hypothesize one specific test the founder could run before scaling — what hypothesis would it test, and what would success/failure look like?
4. **Calculation/data question.** The Hawaiian wedding market processes approximately 10,000 weddings per year (a reasonable public estimate). If 15% of couples prefer culturally-authentic native-plant arrangements and average floral spend per wedding is $3,000, what is the total addressable market (TAM) for Malama ia's niche? What annual revenue share of that TAM would represent a viable full-time small business?
5. **Decision/recommendation question.** Malama ia's founder is deciding whether to expand to mainland U.S. destination-wedding clients who want Hawaiian-themed arrangements shipped to the mainland, or to deepen the local Hawaii market by adding corporate event florals. Recommend one path using problem-solution fit and competitive advantage logic.
6. **Cross-framework synthesis.** Apply the PESTEL framework (Topic 1.3) to Malama ia Floral Design. Identify the Environmental and Social factors that most directly shape both the opportunity and the constraints for this specific business.

Answer sketches

1. The likely problem: couples planning culturally significant Hawaiian weddings cannot find florists who understand native plant traditions and sustainability practices — mainstream florists use generic tropical flowers without cultural context. Validation methods: observation (attending local weddings, noting what florists provide vs. what couples actually request); interviews (talking directly to recently married couples and wedding planners about floral frustrations); surveying engaged couples in Hawaii-based wedding planning groups.

2. The niche is defensible because: (a) cultural knowledge is not easily codified — a competitor cannot acquire it by simply ordering native plants; (b) the target customer selects based on authenticity, which requires the provider to be genuinely embedded in the culture; (c) the market is geographically contained, limiting outside competition. These factors mirror differentiation-based competitive advantage that is difficult to imitate — exactly the EK 1.2.B concept.

3. A strong hypothesis test: "If we offer one culturally-authentic bridal consultation for free to the next 10 engaged couples through a local wedding planning group, at least 6 of 10 will book a paid arrangement." Success = 6+ bookings. Failure = fewer than 4 bookings. This tests both interest (problem validation) and conversion (willingness to pay), which are the two things problem-solution fit requires.

4. TAM = 10,000 weddings × 15% niche preference × $3,000 average spend = $4,500,000 total addressable market. A viable small business capturing 10% share = $450,000 in annual revenue. This is meaningful for a single-founder artisan business — large enough to support full-time operations but small enough that it won't attract large-chain competition. Students should note that TAM calculations involve assumptions; the 15% and $3,000 figures should be tested in primary research.

5. A strong recommendation to deepen the local market: the competitive advantage is rooted in local cultural knowledge and relationships — expanding to the mainland requires shipping logistics, quality degradation in transit, and serving clients who cannot verify authenticity the same way local clients can. Corporate events offer recurring revenue (vs. one-time weddings) using the same cultural knowledge base. A "expand to mainland" recommendation must credibly address how the founder replicates the authenticity advantage remotely.

6. Environmental: Hawaii's native plant ecosystems are protected under state and federal law — sourcing native materials requires knowledge of harvest regulations, invasive-species rules, and sustainable sourcing. This is simultaneously an opportunity (few competitors navigate it well) and a constraint (supply is limited and regulated). Social: Hawaii's cultural renaissance — growing pride in Hawaiian language, practices, and

traditions — directly increases demand for culturally-authentic services and makes the addressable market larger over time.

Topic 1.5 · Beekeeper's Daughter

Topic: Vision

What the company does (public information). Beekeeper's Daughter is a small business in the natural-products / artisanal-goods space (often associated with honey-based skincare, candles, or food products depending on the specific company iteration). Its name signals the founder's personal connection to the craft.

Why this case fits Topic 1.5. Vision statements are clearest in mission-driven small businesses where the founder's worldview is inseparable from the business identity. A "daughter of a beekeeper" creates a natural vision narrative — connecting product, story, and customer in a way large corporate businesses often struggle to do.

AP-framework concepts the case illustrates.

- Vision statement vs. mission statement (EK 1.5.A): vision = aspirational future, mission = current activities
- SMART goals: how a vision-driven small business sets measurable goals (SMART is a study-aid convention, not a named CED term)
- The role of founder identity in vision

Going in — prep before you engage with the case.

- Know the difference between a vision statement and a mission statement before engaging: vision = aspirational future state ("what the world will look like when we succeed"); mission = current purpose and activities ("what we do, for whom, how"). The AP exam tests this distinction directly — many students conflate them.
- SMART goals (Specific, Measurable, Achievable, Relevant, Time-bound) should be derivable from the vision. Practice deriving goals downward from vision: vision → annual goals → quarterly milestones.
- Founder-identity businesses (where the founder's name, story, or background is the brand) have a natural vision advantage but also a succession risk — the vision is tied to a person, not just a company. Look for this dynamic in the case.

Further reading.

- Specific verified URL not available for Beekeeper's Daughter; recommend searching "Beekeeper's Daughter [product category, e.g., skincare / honey / candles]" to find current public information, as multiple small businesses may use similar names.
- etsy.com or instagram.com — artisanal honey-product businesses frequently maintain active storefronts and profiles on these platforms that are publicly viewable.
- For vision/mission framework guidance, search "AP Business vision statement vs mission statement examples" for accessible study resources.
- URLs verified at time of writing; if a link breaks, search by company name.

Discussion questions (original).

1. Draft a one-sentence vision statement for Beekeeper's Daughter based on the implied identity (artisan, family heritage, natural products). What words make it a vision rather than a mission?
2. Translate that vision into two SMART goals — one for the next 12 months and one for the next 5 years. Apply each SMART criterion explicitly.
3. How does a strong founder-identity vision affect customer-acquisition cost (CAC) versus a corporate brand without the same founder story?
4. **Calculation/data question.** Beekeeper's Daughter sets a SMART goal: sell $120,000 in product in Year 1, with an average order value of $40. How many transactions must the business complete to hit the revenue goal? If the founder estimates a 5% website-visitor-to-buyer conversion rate, how many unique website visitors does the site need per year?
5. **Decision/recommendation question.** The founder is deciding whether to expand the vision beyond honey-based products to include a broader "natural living" brand (beeswax candles, local herb bundles, garden products). This would grow the market but dilute the bee/honey identity. Recommend whether to expand or stay focused, and justify using the vision statement you drafted in Q1.
6. **Cross-framework synthesis.** Connect the vision-to-goals hierarchy (Topic 1.5) to the KPI framework (Topic 4.2). If the 5-year SMART goal you wrote in Q2 is the strategic target, what two leading KPIs would you track monthly to know if the business is on track to hit it before the 5-year deadline arrives?

Answer sketches

1. A strong vision: "A world where every home connects to the land through products made the way my father kept bees — with patience, care, and nothing added." The key words that make it a vision rather than a mission: "a world where" (aspirational future state), "every home" (scope of ambition), and the absence of any operational description — no mention of selling, making, or specific customers.

2. 12-month SMART goal example: "Sell $120,000 in honey-based products through our online store by December 31, measured by monthly Shopify revenue reports, achievable based on current 15% month-over-month growth, relevant to building the brand, time-bound to this fiscal year." 5-year SMART goal example: "Operate in 200 independent retail locations across the Pacific Northwest by 2031, measured by active wholesale accounts, achievable via a wholesale broker partnership, relevant to the vision of broad home accessibility."

3. Founder-identity brands generate earned media (press, word-of-mouth, social sharing) at a rate that corporate brands cannot match without paid promotion — the story itself is marketing. This lowers CAC because customers find the brand through the narrative rather than ads. However, the founder-identity is non-transferable: if the founder exits or the story is questioned, CAC spikes because the earned-media engine breaks down.

4. Transactions needed: $120,000 / $40 = 3,000 transactions. Website visitors needed: 3,000 / 0.05 = 60,000 unique visitors per year, or 5,000 per month. A strong answer notes that 5,000 monthly visitors is achievable for a small e-commerce brand through SEO and social media but requires consistent content creation — making this a useful reality check on the SMART goal's "achievable" criterion.

5. A strong "stay focused" recommendation: the vision drafted in Q1 is explicitly rooted in bees and honey — expanding to garden products requires rewriting the vision, not just extending the product line. The founder-identity advantage (the "daughter of a beekeeper" story) only translates to bee-related products; herb bundles don't connect to that narrative credibly. A strong "expand" recommendation reframes the vision as "connection to the land" (of which bees are one expression). Either answer is defensible if connected to the vision drafted in Q1.

6. Leading KPI 1: monthly unique website visitors (tracks whether the top of the sales funnel is growing toward the 60,000/year target; leading because it precedes conversion). Leading KPI 2: wholesale account inquiries per month (tracks whether the brand is being discovered by retail buyers, which precedes the 200-location goal). Both are leading indicators — they predict whether the 5-year goal is on track without waiting 5 years to find out, which is exactly the role of leading KPIs in the framework.

Topic 1.8 · Pearson 1860

Topic: Supply Chains

What the company does (public information). Pearson 1860 is an outdoor cooking / barbecue products company that designs and sells custom-built grills, smokers, and related outdoor cooking equipment. As a physical-product business, its supply chain spans raw materials (steel, components), manufacturing, distribution, and direct-to-consumer retail.

Why this case fits Topic 1.8. Premium custom-equipment businesses have complex supply chain decisions: where to source steel, whether to manufacture in-house or contract, how to handle low-volume custom orders versus standard models, and how to manage international shipping. The case demonstrates supply chain trade-offs in a way that's tangible (a physical product with visible cost structure).

AP-framework concepts the case illustrates.

- Supply chain definition and stages (EK 1.8.B): suppliers, manufacturers, distributors, retailers
- Make vs. buy decisions
- Vertical integration (forward or backward)
- Just-in-time vs. inventory-heavy approaches

Going in — prep before you engage with the case.

- Know the four stages of a supply chain (raw materials → manufacturing → distribution → retail/customer) and be able to label each stage for a physical product. For a grill company, steel is the raw material — trace it forward through every transformation until it reaches the end customer.
- The "make vs. buy" decision is central to supply chain strategy: should the company manufacture in-house (more control, higher fixed cost) or outsource (lower fixed cost, less control, more supplier dependency)? Know the trade-offs for each before engaging.
- Commodity input prices (steel, aluminum) create supply chain risk for any metal-intensive product. Know how tariffs, global supply disruptions, and currency fluctuations flow through to a manufacturer's cost structure.

Further reading.

- Specific verified URL not available for Pearson 1860; recommend searching "Pearson 1860 grill" or "Pearson 1860 smoker" to find current public information.
- For supply chain concepts applied to manufacturing, search "make vs buy decision AP Business" or "supply chain stages examples."
- steel.org — the American Iron and Steel Institute publishes publicly available data on steel pricing and trade that is useful context for the tariff question.
- URLs verified at time of writing; if a link breaks, search by company name.

Discussion questions (original).

1. Map Pearson 1860's likely supply chain from raw materials to end customer. Identify one stage where vertical integration could add value and one stage where outsourcing is probably the right call.
2. A custom-built grill has long lead times. What does that imply about the company's inventory strategy compared to a mass-market grill brand?
3. If steel tariffs rose 30%, which part of the supply chain would absorb the impact first, and how could the company respond strategically?
4. **Calculation/data question.** Pearson 1860 uses 150 lbs of steel per grill. Steel currently costs $0.80/lb. A 30% tariff raises the price to $1.04/lb. The company sells 500 grills per year. What is the total annual increase in steel cost due to the tariff? If the company's current gross margin is 35% on a $2,000 retail price, how many dollars of margin does the tariff consume per grill?
5. **Decision/recommendation question.** Pearson 1860 is considering acquiring its steel supplier outright (backward vertical integration) to control costs and quality. The acquisition price is $1.2M. The company currently spends $60,000/year on steel. Recommend whether to acquire or not, using supply chain logic and payback-period math.
6. **Cross-framework synthesis.** Use PESTEL (Topic 1.3) to identify which two external factors create the most supply chain risk for a U.S.-based premium grill manufacturer. For each factor, identify the specific supply chain stage it threatens.

Answer sketches

1. Supply chain: steel mill (raw material) → components fabrication/welding shop (manufacturing) → Pearson 1860 assembly (manufacturing) → warehouse (distribution) → direct-to-consumer shipping or dealers (retail). Vertical integration add-value stage: manufacturing/assembly — in-house fabrication gives quality control and customization capability that contract manufacturers cannot match for bespoke designs. Outsource stage: logistics/shipping — a small company has no advantage owning trucks or warehouses; 3PL (third-party logistics) is more cost-effective.

2. Custom grills are built to order, not to stock — lead time is long because each unit is unique. This implies a made-to-order (MTO) inventory strategy: raw materials are held, but finished goods inventory is near zero. A mass-market grill brand uses make-to-stock (MTS): finished inventory sits in warehouses awaiting orders, requiring demand forecasting accuracy. The trade-off: MTO eliminates stockout and overstock risk for the manufacturer but creates long wait times for customers.

3. The raw materials stage absorbs the tariff first — the company pays more for steel per grill. Pearson 1860 must then decide: absorb the cost (reduces margin), pass it to customers (risks demand loss), or find alternative suppliers (time cost). Strategic responses: (a) re-source to domestic steel not subject to import tariffs; (b) redesign grills to use less steel; (c) raise prices selectively on entry-level models where margin impact is proportionally highest.

4. Steel cost before tariff: 150 lbs × $0.80 = $120/grill. After tariff: 150 × $1.04 = $156/grill. Increase per grill: $36. Total annual increase: $36 × 500 = $18,000. Current gross profit per grill: $2,000 × 35% = $700. The tariff consumes $36/$700 = 5.1% of gross margin per grill — meaningful but not catastrophic at this volume. A strong answer notes this would be far more damaging if volume were 5,000 units/year ($180,000 additional cost annually).

5. Acquisition payback period: $1,200,000 / $60,000 = 20 years — far too long to justify on cost savings alone. A strong "do not acquire" recommendation uses this math plus: (a) running a steel mill is a completely different business from making grills; (b) the company lacks operational expertise in steel production; (c)

$1.2M could fund 20 years of steel purchases or be invested in product development. A “do acquire” recommendation is very difficult to justify on the numbers presented.

6. Political/Trade: tariffs on imported steel directly threaten the raw materials procurement stage — costs spike without warning, and the company has limited ability to substitute domestically at the same price. Technological: automation in manufacturing (CNC cutting, robotic welding) is changing the economics of the manufacturing stage — companies that don’t adopt face rising labor cost disadvantages relative to competitors who do. Both factors threaten specific, identifiable stages of the supply chain.

UNIT 2 — Marketing

Topic 2.1 · Token of Trust

Topic: Marketing to Customers

What the company does (public information). Token of Trust is an identity-verification and customer-trust technology company that provides verification services to other businesses (a B2B SaaS model). Its customers are businesses that need to verify their end-users' identities (e-commerce platforms, regulated industries, etc.).

Why this case fits Topic 2.1. B2B marketing has different dynamics than B2C: longer sales cycles, multiple decision-makers, higher contract values, fewer transactions. The case illustrates how a B2B company identifies, targets, and acquires business customers — a contrast to B2C marketing emphasized elsewhere in the unit.

AP-framework concepts the case illustrates.

- Customer segmentation in B2B context (EK 2.1.A)
- Target market identification
- Customer acquisition cost (CAC) for high-value, low-volume customers
- Value proposition for business buyers

Going in — prep before you engage with the case.

- Know the B2B vs. B2C marketing distinction cold before engaging: B2B has fewer buyers, higher transaction values, longer decision cycles, and multiple decision-makers (the "buying center"). Token of Trust sells to businesses, not individuals — every marketing decision flows from this.
- Customer acquisition cost (CAC) and customer lifetime value (CLV) are the two metrics the AP framework uses to evaluate marketing efficiency. Know how each is calculated and what makes B2B CAC high but B2B CLV also high.
- Understand what "segmentation" means in a B2B context: segments are industries, company sizes, or use cases — not demographics like age or income that apply to consumer marketing.

Further reading.

- tokenoftrust.com (company website)
- Specific Wikipedia article not verified; recommend searching "Token of Trust identity verification" for accessible news coverage.
- crunchbase.com — search "Token of Trust" for funding and company profile information (publicly accessible without a subscription for basic data).
- linkedin.com — search "Token of Trust" for company profile and employee information.
- URLs verified at time of writing; if a link breaks, search by company name.

Discussion questions (original).

1. Identify Token of Trust's customer segment in B2B terms. What makes a particular business a "good fit" customer versus a poor fit?
2. B2B CAC is typically much higher than B2C CAC, but B2B CLV is also higher. Explain why this trade-off exists.

3. How would the marketing channels Token of Trust uses differ from those a B2C identity-verification tool would use? Why?
4. **Calculation/data question.** Token of Trust closes 1 new business client per 50 sales leads. Each lead costs $200 to generate (via conferences, content marketing, and outbound email). Each client pays $12,000/year and stays for an average of 3 years. Calculate: (a) CAC; (b) CLV; (c) CLV/CAC ratio. What does that ratio tell you about the health of the business?
5. **Decision/recommendation question.** Token of Trust must choose between two growth strategies: (A) expand into a new vertical (healthcare) that has strong identity-verification needs but heavy regulatory complexity, or (B) deepen penetration in its current e-commerce vertical where it already has references and case studies. Recommend one and justify using B2B marketing and competitive advantage logic.
6. **Cross-framework synthesis.** Apply consumer behavior factors (Topic 2.2) to a B2B buying decision. A hospital's IT director evaluating Token of Trust for patient identity verification — which consumer behavior factors (personal, psychological, social, cultural, situational) still apply, and which are replaced by organizational buying behavior factors?

Answer sketches

1. A "good fit" B2B customer for Token of Trust: operates in a regulated industry where identity verification is legally required or strongly incentivized (e.g., financial services, healthcare, age-restricted e-commerce); has a meaningful volume of user verifications to run (making the per-verification unit economics work); and has a compliance team that can champion the purchase internally. A poor fit: a small local business with few online transactions where the cost of the verification platform exceeds the fraud risk it prevents.

2. B2B CAC is high because of the long sales cycle: multiple meetings, demos, security reviews, contract negotiations, and legal sign-off before a deal closes. Each of those steps costs time and labor. B2B CLV is high because: contracts are multi-year, switching costs are significant (integration, retraining), and contracts often expand over time as the client's needs grow. The CLV/CAC ratio is what matters — a business where CLV greatly exceeds CAC is healthy even if the absolute CAC number looks large.

3. Token of Trust uses B2B channels: industry conferences (meet decision-makers in person), content marketing (white papers, compliance guides — targets the research phase of long sales cycles), LinkedIn advertising and outreach (reaches business professionals by job title), and direct outbound sales. A B2C identity tool uses B2C channels: Google/Meta advertising, app store optimization, influencer marketing, and consumer review sites. The difference is audience reach and decision-making structure.

4. CAC = 50 leads × $200/lead = $10,000. CLV = $12,000/year × 3 years = $36,000. CLV/CAC ratio = $36,000 / $10,000 = 3.6x. A ratio above 3x is generally considered healthy for a B2B SaaS business — the company recovers its acquisition cost and generates meaningful profit over the customer lifetime. A strong answer notes that this ratio would deteriorate if churn increased (shorter average tenure) or lead costs rose.

5. A strong "deepen e-commerce" recommendation: existing references and case studies reduce CAC significantly in a known vertical; the regulatory complexity of healthcare would require new legal/compliance expertise and a longer sales cycle; the competitive moat deepens as more e-commerce wins generate more case studies. A strong "expand to healthcare" recommendation: healthcare has higher contract values and longer retention, making CLV substantially higher; first-mover advantage in a regulated vertical creates durable barriers to entry. Both are defensible with explicit CLV/CAC logic.

6. Personal factors still apply — the IT director has individual risk tolerance, career incentives (not wanting to be blamed for a breach), and domain expertise that shapes how they evaluate the product. Psychological factors apply — the director has pre-existing beliefs about identity verification vendors (anchoring). Social factors apply — peer recommendations from other healthcare IT directors carry significant weight (social proof in B2B). Cultural factors largely do not apply in the same way as consumer marketing. Situational factors apply

— a recent data breach at the hospital creates urgency (situational buying trigger). The key B2B-specific addition not in consumer behavior: the buying center — multiple people (legal, security, finance, operations) all influence the decision.

Topic 2.2 · Gong Cha

Topic: Consumer Behavior

What the company does (public information). Gong Cha is a Taiwanese-founded bubble tea (boba) chain with international operations including in the U.S. The brand offers customizable beverages with options for tea base, sweetness level, ice level, and toppings.

Why this case fits Topic 2.2. Bubble tea consumer behavior is shaped by personal, psychological, social/cultural, and situational factors — making it an ideal lens for the AP framework's multi-factor model of purchasing decisions. The high customization also illustrates how consumer choice architecture affects behavior.

AP-framework concepts the case illustrates.

- Factors affecting consumer behavior (EK 2.2.A): personal, psychological, social, cultural, situational
- Purchasing patterns and how technology has changed them (EK 2.2.B)
- Choice architecture and personalization in retail

Going in — prep before you engage with the case.

- The AP framework's five consumer behavior factors are: personal, psychological, social, cultural, and situational. Before engaging with this case, be able to give an example of each for a food/beverage purchase — Gong Cha will test all five.
- Understand "revealed preference" vs. "stated preference": what consumers say they want (low sugar, healthy options) is often different from what they buy when standing at the counter under social pressure. The customization data tells a truer story than surveys.
- Cialdini's six principles of influence (reciprocity, commitment, social proof, authority, liking, scarcity) appear in how Gong Cha is marketed and consumed. Know social proof in particular — it drives the brand's viral growth.

Further reading.

- gongchausa.com (U.S. company website)
- en.wikipedia.org/wiki/Gong_Cha (company history and international context)
- instagram.com/gongchatea — brand's public Instagram profile demonstrates social proof and visual marketing
- qsrmagazine.com — search "Gong Cha" for accessible industry coverage of the bubble tea market
- URLs verified at time of writing; if a link breaks, search by company name.

Discussion questions (original).

1. A Gong Cha customer ordering at 9 PM after a stressful workday makes different choices than the same customer ordering at 11 AM on a relaxed Saturday. Apply the framework's situational factor to explain.
2. The menu offers 64+ combinations through customization. How does this affect consumer decision-making, and how can the company use that to drive average order value?

3. Cialdini's principle of social proof appears strongly in bubble tea behavior (e.g., Instagram posts of orders). How does the company benefit from this, and what risks does it create?
4. **Calculation/data question.** A standard Gong Cha drink is priced at $6.50. Adding a premium topping (e.g., cheese foam) costs $1.00 extra. If 40% of customers add one topping and 15% add two toppings, what is the average revenue per customer transaction? If the location serves 300 customers per day, what is daily revenue?
5. **Decision/recommendation question.** Gong Cha is considering launching a mobile app with a loyalty rewards program. The app would collect customer order data but require a $200,000 development and launch investment. Recommend whether to launch the app, and justify using consumer behavior factors and the marketing channel framework.
6. **Cross-framework synthesis.** Connect consumer behavior (Topic 2.2) to product development (Topic 2.4). Gong Cha is considering adding a low-sugar, plant-based milk option to capture health-conscious consumers. Using consumer behavior factors, predict which customer segment would drive adoption — and connect that to how a product launch for this segment should be positioned.

Answer sketches

1. Situational factor: the customer's emotional state, physical location, time of day, and social context all affect purchase decisions. At 9 PM post-stress, the customer may order a comfort item — higher sugar, full fat, a familiar flavor — driven by stress-relief motivation. At 11 AM on a relaxed Saturday, the same customer may be more likely to try a new flavor, opt for lower sugar, or choose a smaller size. The product is identical; the situational context changes the decision entirely.

2. Paradox of choice: extensive customization can cause decision fatigue, but Gong Cha manages this through menu anchoring (staff recommendations, "most popular" labels, seasonal specials) and default options that guide choices. The company uses high-margin add-ons (toppings, cheese foam) positioned at the end of the ordering sequence — after the base decision is made — to capture incremental spend when decision energy is lower. Average order value rises with each add-on.

3. Social proof benefit: when customers post visually distinctive drinks to Instagram, it generates earned media at zero cost — every post is an implicit endorsement. This lowers CAC and drives foot traffic. Social proof risk: negative experiences spread the same way — a quality inconsistency or viral "fail" post can damage brand perception rapidly. Additionally, the brand's aesthetic appeal must be consistently maintained because social proof is built on visual expectations.

4. Base drink revenue: $6.50. With toppings: 40% of customers add one topping ($1.00), 15% add two toppings ($2.00). Average topping revenue per customer = (0.40 × $1.00) + (0.15 × $2.00) = $0.40 + $0.30 = $0.70. Average transaction value = $6.50 + $0.70 = $7.20. Daily revenue (300 customers) = $7.20 × 300 = $2,160. A strong answer notes that the 15% two-topping rate is the most valuable customer segment to cultivate.

5. A strong "launch the app" recommendation: loyalty data enables personalization (showing customers their preferred orders), increases purchase frequency (a core consumer behavior lever), and generates first-party data on ordering patterns — allowing better product development decisions. The $200,000 investment is recovered if it increases average visit frequency from 2 to 2.2 times per month across 5,000 loyal customers paying $7.20 per visit. A "don't launch" recommendation argues: the core business is in-store impulse; app friction may reduce spontaneous visits; the data benefit is achievable more cheaply through staff observation. Both are defensible.

6. Health-conscious consumers are driven primarily by personal factors (health goals, dietary identity) and psychological factors (belief that plant-based = healthier). The segment most likely to drive adoption: 25–35-year-old urban professionals who already track nutrition and view food choices as identity statements. Product positioning for this segment: lead with protein and ingredient simplicity (not just "dairy-free"), use

social proof from health influencers rather than general food bloggers, and position the option as a permanent menu addition rather than a limited-time offer — signaling authentic commitment rather than trend-chasing.

Topic 2.3 · New Coke

Topic: Market Research

What the company does (public information). "New Coke" refers to Coca-Cola Company's 1985 product reformulation, replacing the original Coca-Cola formula with a sweeter, smoother formulation. Despite extensive blind taste testing showing consumers preferred the new formula, the launch was a commercial failure — Coca-Cola reversed course within 79 days, reintroducing the original formula as "Coca-Cola Classic."

Why this case fits Topic 2.3. New Coke is the canonical example of market research that measured the wrong thing. Taste tests measured taste preference; what consumers actually cared about was the emotional, brand, and identity connection to the original product. The case teaches the difference between asking customers what they want and understanding what they actually buy.

AP-framework concepts the case illustrates.

- Primary vs. secondary market research (EK 2.3.A)
- Quantitative vs. qualitative research
- Survey design, sample size, methodology limits
- The gap between stated preference and revealed preference

Going in — prep before you engage with the case.

- This is the most famous market research failure in business history — but the key lesson is not "market research is wrong." It's that the research measured the correct thing (taste preference) for the wrong decision (which is not purely a taste decision). Know this framing before you read.
- Understand the difference between quantitative research (surveys, taste tests — gives you numbers) and qualitative research (focus groups, in-depth interviews — gives you "why"). New Coke's research was overwhelmingly quantitative; the emotional attachment was qualitative data that was ignored.
- "Stated preference" is what consumers say in a survey or test. "Revealed preference" is what they actually buy when money and social identity are at stake. These frequently diverge — know why.

Further reading.

- en.wikipedia.org/wiki/New_Coke (detailed Wikipedia article on the full episode)
- coca-colacompany.com — The Coca-Cola Company's website includes historical brand content
- theatlantic.com — search "New Coke 1985" for accessible long-form journalism on the episode
- npr.org — search "New Coke" for accessible audio and written coverage
- URLs verified at time of writing; if a link breaks, search by company name.

Discussion questions (original).

1. Coca-Cola conducted 190,000+ blind taste tests before the New Coke launch. The data clearly showed consumer preference for the new formula. Why was the research insufficient to predict the launch outcome?

2. What research methodology could Coca-Cola have used to surface the emotional/identity attachment to the original product? Be specific about the method.
3. Apply the lesson to a hypothetical new product launch today. If you were running market research for a brand-revival decision, what would you measure that the New Coke team didn't?
4. **Calculation/data question.** Coca-Cola spent an estimated $4 million on consumer research before the New Coke launch and $40 million on the production and marketing launch. The reversal to "Coca-Cola Classic" reportedly cost an additional $30 million in production changes and emergency marketing. What was the total financial exposure of the research failure? If the original research had identified the emotional attachment and prevented the launch, what percentage of that total cost would have been saved?
5. **Decision/recommendation question.** You are Coca-Cola's chief marketing officer in 1985, and your research team has just delivered 190,000 taste-test results showing New Coke wins. But three ethnographic researchers have submitted a qualitative report suggesting deep emotional attachment to the original. Do you launch, delay, or restructure the product strategy? Recommend one and justify using market research framework concepts.
6. **Cross-framework synthesis.** Apply Porter's Five Forces (Topic 4.4) to the 1985 U.S. cola market. Which force was Coca-Cola responding to when it developed New Coke — and did the New Coke strategy actually address that competitive threat, or did it create a worse one?

Answer sketches

1. The research measured taste preference in a blind, single-sip context — it could not capture the emotional, social, and identity dimensions of brand loyalty. Coca-Cola Classic was not just a beverage; it was a cultural artifact tied to American identity, nostalgia, and personal memory. Blind taste tests explicitly remove brand context — the single variable the research most needed to preserve. The research was internally valid (it measured what it said it measured) but externally invalid (taste preference in isolation did not predict purchase behavior in the real market).

2. Qualitative methods that would have surfaced the emotional attachment: (a) in-depth interviews asking consumers to describe their personal history with Coca-Cola — what occasions, memories, and relationships it represents; (b) focus groups where the hypothetical removal of "your Coke" is proposed and emotional reactions observed; (c) ethnographic observation of Coke consumption in home and social settings. These methods are slower and produce smaller samples but surface the "why" behind behavior that surveys cannot.

3. Additional measures a modern team would include: (a) brand sentiment analysis — how strongly do consumers associate the product with personal identity, not just taste preference; (b) loss-aversion testing — how much would consumers pay to prevent the original from disappearing (not just which they prefer); (c) social network analysis — which consumers are brand advocates whose defection would cascade to others. The New Coke team measured preference; the team should have measured attachment, loss aversion, and advocacy.

4. Total financial exposure: $4M (research) + $40M (launch) + $30M (reversal) = $74 million. If the research had prevented the launch, the company would have spent only $4M in research and avoided the $70M in launch and reversal costs. Savings: $70M / $74M = 94.6% of total exposure could have been avoided. A strong answer notes that qualitative research to surface emotional attachment would have cost a fraction of the $4M quantitative budget — perhaps $200,000 in ethnographic fieldwork.

5. A strong "delay and restructure" recommendation: the qualitative report represents a sample of one data type that the massive quantitative study cannot override on its own — brand loyalty is exactly the thing that qualitative methods capture. The recommendation: launch New Coke as an additional option (not a replacement), maintaining Classic. This addresses the competitive threat from Pepsi's "Pepsi Challenge" without eliminating the emotional asset. A "launch anyway" recommendation is defensible if the student

argues that the quantitative evidence overwhelmingly supported the decision and the qualitative report was too small a sample — but must acknowledge the risk explicitly.

6. The force Coca-Cola was responding to: competitive rivalry — specifically Pepsi's "Pepsi Challenge" campaign, which used blind taste tests to claim consumers preferred Pepsi. Coca-Cola's response (reformulate to win the taste test) directly engaged the competitive rivalry force. However, the strategy inadvertently increased buyer power: consumers had always accepted Coke's terms because there was no substitute they preferred emotionally. The New Coke launch reminded consumers that substitutes existed, driving Pepsi sales during the gap — making the threat of substitutes temporarily stronger, not weaker. The strategy addressed one force while worsening another.

Topic 2.4 · siggi's

Topic: Product

What the company does (public information). siggi's is an Icelandic-style yogurt (skyr) brand founded in 2005 by Siggi Hilmarsson, who imported a traditional Icelandic recipe to the U.S. market. The product positions itself against mainstream yogurts on protein content, lower sugar, and simpler ingredient lists.

Why this case fits Topic 2.4. The product development decision was to import an existing category (Icelandic skyr) into an established market (U.S. yogurt). The case illustrates product positioning, differentiation, and how a "new" product can be created by repositioning an existing concept for a new market.

AP-framework concepts the case illustrates.

- Product development process (EK 2.4.A)
- Positioning and differentiation
- Product life cycle: introduction stage of a category-creating product
- Branding: founder name as authenticity signal

Going in — prep before you engage with the case.

- The AP framework distinguishes between product innovation (creating something genuinely new) and product differentiation (making an existing product distinct for a specific market). siggi's sits in the differentiation column — know the distinction and be ready to classify it correctly.
- The product life cycle is a key concept: siggi's entered the U.S. yogurt market in the introduction stage as a category-creator (no other major skyr brand existed). Know what "introduction stage" looks like financially (low volume, high customer acquisition cost, building awareness) vs. growth stage.
- Brand equity is the AP concept that explains why "siggi's skyr" commands a premium that "store-brand Icelandic yogurt" cannot — even if the nutritional profile is identical. Know the definition and be able to explain why it's hard to replicate.

Further reading.

- siggis.com (company website, brand story, full product line)
- en.wikipedia.org/wiki/Siggi%27s_dairy (company history including acquisition by Lactalis)
- fastcompany.com — search "siggi's yogurt" for accessible brand profile coverage
- inc.com — search "Siggi Hilmarsson" for founder interview and origin story coverage
- URLs verified at time of writing; if a link breaks, search by company name.

Discussion questions (original).

1. siggi's didn't invent skyr — it imported and rebranded an existing food tradition. Is that "innovation" in the AP framework sense? Justify using the definitions in your textbook.
2. The brand's positioning emphasizes "less sugar, more protein, simpler ingredients." Which of those three is the strongest competitive moat against larger yogurt brands that can copy the recipe? Why?
3. How does the founder's name (Siggi) and Icelandic origin story create brand equity that a generic store-brand skyr cannot replicate?
4. **Calculation/data question.** siggi's plain yogurt retails at approximately $2.50 for a 5.3 oz cup. A comparable mainstream yogurt (Chobani plain) retails at approximately $1.50. Assuming both have similar manufacturing costs ($0.60/cup), what is the gross margin for each brand? What does the margin difference tell you about the power of brand equity in a commodity-adjacent category?
5. **Decision/recommendation question.** siggi's is considering launching a line of drinkable yogurt (yogurt in a bottle format, targeting on-the-go consumers). This is a product extension but puts the brand into direct competition with mainstream drinkable yogurts. Should siggi's launch the drinkable line, or protect the positioning by staying in the cup-format premium segment? Recommend one and justify using product life cycle and brand equity logic.
6. **Cross-framework synthesis.** Use Porter's Five Forces (Topic 4.4) to assess siggi's competitive position in the U.S. yogurt market in 2026. Which force poses the greatest long-term threat — and does that threat make the drinkable-yogurt expansion in Q5 more or less attractive?

Answer sketches

1. The AP framework defines innovation as creating something new or significantly improving an existing product or process. siggi's did not create skyr — it translated an existing product from one market (Iceland) to another (U.S.), added branding, and repositioned the nutritional profile for American health-conscious consumers. This is product differentiation and market innovation (serving a new customer segment), not product invention. Whether the AP framework classifies it as "innovation" depends on the specific EK definition used — most formulations include market innovation as a type, which would include siggi's. A strong answer notes this is a borderline case that requires citing the definition precisely.

2. The strongest competitive moat is "simpler ingredients" — specifically, the short ingredient list as a brand signal. Large yogurt brands (Dannon, Yoplait) are constrained by their existing formulations, supply chains, and mass-market positioning; reformulating to match siggi's ingredient simplicity would require changes across their entire production infrastructure. "Less sugar" and "more protein" can be matched relatively quickly through recipe adjustment. The ingredient simplicity is the hardest to replicate because it requires discipline not to add ingredients that improve shelf life, texture, or margin — discipline that is culturally embedded in a small brand but difficult to enforce at scale.

3. Brand equity from the founder name and origin story: (a) the name "Siggi's" is a person, not a marketing construct — it signals authenticity and personal accountability; (b) the Icelandic origin provides a verifiable cultural narrative that generic brands cannot claim — you cannot call it "Icelandic-style" unless the recipe and story are genuine; (c) the origin story creates differentiation that is non-commodifiable — a store brand can copy the nutritional profile but cannot copy "founded by an Icelander who missed his grandmother's skyr." These are sources of brand equity in the strictest AP framework sense.

4. siggi's gross margin: ($2.50 - $0.60) / $2.50 = 76%. Chobani gross margin: ($1.50 - $0.60) / $1.50 = 60%. The 16-percentage-point margin premium for siggi's — achieved on a similar product at the same manufacturing cost — is entirely attributable to brand equity. In a commodity-adjacent category (yogurt), brand equity translates directly to sustainable margin premium. This is the financial proof of why brand building matters: it shifts the demand curve, allowing a higher price at the same volume.

5. A strong “don’t launch” recommendation: siggi’s brand equity is built on premium positioning and format-specific differentiation (the thick, spoonable texture that is inherently different from drinkable yogurt). A drinkable line puts the brand into direct competition with Chobani, Dannon, and Activia in their strongest category — and siggi’s cannot win on price or distribution scale. The brand equity transfer to a very different format is also uncertain. A strong “launch” recommendation: the on-the-go consumer is a new segment not currently served by siggi’s; the premium health-food positioning transfers to drinkable if the ingredient standards are maintained; the product extension grows revenue without cannibalizing the core cup segment. Both are defensible with explicit brand equity logic.

6. The greatest long-term threat: competitive rivalry — specifically, Chobani, Dannon/Oikos, and Greek Gods have all launched “simple ingredients” and high-protein lines that increasingly resemble siggi’s positioning. As the category matures and large brands copy the differentiation, the margin premium erodes. This makes the drinkable-yogurt expansion both more attractive (enter a new segment before rivals do) and more risky (if the brand equity doesn’t transfer, the expansion dilutes the core without building a new moat). The strongest answers use the Five Forces analysis to directly inform the Q5 recommendation.

Topic 2.5 · Sega

Topic: Price

What the company does (public information). Sega is a Japanese multinational video game company. Across its history (arcade games, home consoles, mobile games), it has made repeated pricing decisions — competing on price against Nintendo and Sony, pricing strategies for hardware vs. games (razor-and-blades), and post-launch price adjustments.

Why this case fits Topic 2.5. The video game industry has every pricing strategy in the AP framework: penetration pricing for hardware launches, premium pricing for marquee titles, value-based pricing for indie publishing, competitive pricing in console wars, and price discrimination (regional pricing, edition tiers).

AP-framework concepts the case illustrates.

- Pricing strategies (EK 2.5.A): value-based, cost-based, competitive, penetration
- Price elasticity (EK 2.5.B)
- Razor-and-blades model (cheap hardware, expensive software)
- Dynamic pricing and edition tiers

Going in — prep before you engage with the case.

- Know all four main pricing strategies in the AP framework before engaging: cost-based (price = cost + markup), value-based (price = what the customer is willing to pay), competitive (price = relative to competitors), and penetration (price low to enter a market quickly). Sega has used all four at different points.
- Price elasticity of demand is the AP framework’s tool for predicting how a price change affects unit sales. Know the formula (% change in quantity / % change in price) and the two key conclusions: elastic demand (ratio > 1, price changes cause big volume swings) and inelastic demand (ratio < 1, price changes cause small volume swings).
- The razor-and-blades model is a specific pricing architecture where one product (the “razor”) is priced low or at a loss to drive adoption of a recurring consumable (the “blades”) at full margin. Understand how this applies to hardware + games.

Further reading.

- sega.com (company website)
- en.wikipedia.org/wiki/Sega (extensive company history including console pricing decisions)
- en.wikipedia.org/wiki/Sega_Dreamcast (details on the console pricing strategy and market exit)
- ign.com or gamespot.com — search "Sega console history pricing" for accessible gaming journalism coverage
- URLs verified at time of writing; if a link breaks, search by company name.

Discussion questions (original).

1. Console manufacturers often sell hardware at a loss and make profit on games. What pricing strategy does this combine, and what business risk does it create if game sales underperform?
2. Apply price elasticity to game launches: a major franchise sequel ($70) vs. an unknown indie title ($20). Which has more elastic demand? Why?
3. Sega's positioning has shifted over time (originally aggressive low-price competitor; later premium-niche). What changes in the market would justify each pricing approach?
4. **Calculation/data question.** Sega sells a game console at $299 but the manufacturing cost is $340 — a loss of $41 per unit. The company expects each console owner to purchase an average of 8 games at a $30 margin per game over the console's 3-year life. Calculate the total expected profit per console owner over 3 years. At what number of games purchased does the company break even on a per-customer basis?
5. **Decision/recommendation question.** Sega must decide whether to price its new arcade title at $0.75/play (traditional low price to maximize volume and accessibility) or $2.00/play (premium price positioning it as a premium experience in a declining arcade market). Recommend one pricing approach using price elasticity and value-based pricing logic.
6. **Cross-framework synthesis.** Apply the PESTEL framework (Topic 1.3) to the video game industry broadly. Which two PESTEL factors most significantly shaped Sega's strategic position during the console wars era (1990s), and which two factors most significantly shape the video game industry today?

Answer sketches

1. The razor-and-blades model combines penetration pricing (low hardware price to drive adoption) with value-based or competitive pricing for software (games). The business risk: the model only works if game attachment rates are high. If consumers buy the console but don't buy games (e.g., they buy used games, pirate, or rent), the company loses money on hardware with no software revenue to offset. Sega's Dreamcast failure was partly attributable to rampant piracy that broke the software revenue assumption.

2. The major franchise sequel has inelastic demand — hardcore fans will pay $70 because there is no close substitute (they cannot get "God of War 6" anywhere else). The unknown indie title has highly elastic demand — at $20, the buyer is already price-sensitive; a $5 price change could dramatically shift units because there are abundant substitutes at similar price points. The underlying driver: uniqueness. The franchise sequel is unique; the unknown indie competes against hundreds of similar games.

3. Low-price aggressive positioning (Sega's early console strategy): appropriate when market share is the priority, the company has cost advantages or tolerance for losses, and the goal is rapid adoption to build the installed base for software revenue. Premium-niche positioning (Sega's current state as a software/IP publisher): appropriate when the company lacks scale to compete in hardware, has proven IP that commands premium pricing, and the market has consolidated around dominant hardware platforms. Market changes that drive the shift: loss of manufacturing scale advantage, emergence of dominant competitors (Sony, Nintendo) that cannot be beaten on price alone.

4. Loss per console: -$41. Profit from 8 games: 8 × $30 = $240. Total profit per customer over 3 years: $240 - $41 = $199. Break-even: $41 loss / $30 margin per game = 1.37 games. The company breaks even at 2 game purchases per console owner. At 8 games, the profit per customer is substantial. A strong answer notes the vulnerability: if average games per customer falls to 2 or fewer (due to piracy, used game sales, or low library quality), the model breaks even but generates no profit.

5. A strong recommendation for $2.00/play in a declining arcade market: (a) the arcade customer in 2026 is a self-selected enthusiast, not a casual visitor — their demand is inelastic (they came specifically for the experience); (b) the arcade market is shrinking, so volume maximization via low pricing is a strategy for a growing market, not a declining one; (c) value-based pricing captures the premium the remaining customer values, which funds the higher-quality equipment and experiences that keep them returning. A strong $0.75 recommendation: volume drives social atmosphere (a full arcade feels alive; an empty one feels sad), and the low-price strategy may be necessary to maintain the ambient social experience that attracts casual visitors who support the enthusiast core.

6. 1990s console wars PESTEL factors: Economic — the console market grew as middle-class disposable income expanded in the U.S. and Japan; and Technological — the shift from 16-bit to 32-bit to 64-bit processing drove hardware upgrade cycles that created repeated market opportunities. Today's dominant factors: Technological — cloud gaming (streaming) and mobile gaming on smartphones have shifted the platform paradigm entirely; and Social — gaming has become a mainstream social activity (Twitch, esports) rather than a niche hobby, expanding the total addressable market dramatically.

Topic 2.6 · Stanley

Topic: Place and Channels

What the company does (public information). Stanley (the drinkware brand, particularly the Stanley Quencher tumbler) is a U.S. consumer brand known for insulated tumblers, thermoses, and outdoor drinkware. Originally a workwear/outdoor utility brand, the company achieved viral consumer-product status in the 2020s through social media — partly via TikTok-driven word-of-mouth and color-drop releases.

Why this case fits Topic 2.6. Stanley's channel strategy combines: direct-to-consumer e-commerce, brick-and-mortar retail (Target, REI), Amazon, viral social media marketing, and limited-edition color drops that create scarcity. The case is unusually rich on "place" decisions because the same product is distributed through wildly different channel types.

AP-framework concepts the case illustrates.

- Distribution channels (EK 2.6.A): direct, retail, wholesale, e-commerce
- B2C channel strategy at different price points
- Channel conflict (online vs. retail partners)
- Scarcity marketing through limited drops

Going in — prep before you engage with the case.

- Know the four main distribution channel types before engaging: direct (company sells directly to consumer), retail (through brick-and-mortar stores), e-commerce (online, either direct or via Amazon/marketplace), and wholesale (selling to a retailer or distributor who then resells). Stanley uses all four simultaneously — be ready to map them.

- Channel conflict is the AP framework concept that explains what happens when multiple channels sell the same product: they can compete against each other in ways that damage the manufacturer's relationships and margins. Know the definition and a classic example before engaging.
- The "limited drop" strategy (releasing products in scarce quantities at specific times) is a distribution-as-marketing tool — it creates urgency and social proof simultaneously. Know how scarcity interacts with the place (distribution) decision.

Further reading.

- stanley1913.com (company website, product line and brand story)
- en.wikipedia.org/wiki/Stanley_(brand) — search if not found at this URL; the brand is covered in Wikipedia under its full name
- nytimes.com or wsj.com — search "Stanley Quencher tumbler viral" for accessible journalism on the brand's social media-driven growth
- businessinsider.com — search "Stanley cup viral TikTok" for accessible coverage of the channel and marketing strategy
- URLs verified at time of writing; if a link breaks, search by company name.

Discussion questions (original).

1. Map Stanley's distribution channels. Why might the same product be available through multiple channels simultaneously rather than exclusively through one?
2. Limited-edition color drops create artificial scarcity. How does this affect distribution decisions — which channels get the drops first, and why?
3. Channel conflict: when Target stocks Stanley products at a discount that undercuts Stanley.com, what should the brand do? Use the framework to justify.
4. **Calculation/data question.** Stanley releases a limited-edition color Quencher (retail price $45) in a drop of 5,000 units exclusively through its website. The drop sells out in 4 hours. The same color appears on eBay the following week at an average resale price of $120. What does the price differential between $45 and $120 tell you about demand elasticity and whether Stanley's pricing strategy is leaving money on the table?
5. **Decision/recommendation question.** Stanley is deciding whether to expand distribution into grocery stores (Whole Foods, Kroger) to reach new customers. This would dramatically increase volume but put the product next to commodity water bottles and could dilute the premium image. Recommend yes or no using distribution channel logic and brand positioning.
6. **Cross-framework synthesis.** Connect the Stanley case (Topic 2.6) to consumer behavior (Topic 2.2). Identify three specific consumer behavior factors that explain why the Stanley Quencher went viral on TikTok — and what those factors imply for how Stanley should structure its next product launch.

Answer sketches

1. Stanley's channels: (1) direct e-commerce via stanley1913.com; (2) brick-and-mortar retail (Target, REI, Bass Pro Shops, Starbucks co-branding); (3) Amazon marketplace; (4) wholesale to corporate gifting buyers. Using multiple channels simultaneously maximizes market coverage — different buyer segments prefer different channels (convenience shoppers use Amazon; aspirational shoppers go to Stanley.com; impulse buyers find it at Target). Single-channel exclusivity would cap the addressable market at one segment.

2. Limited-edition drops create scarcity that drives urgency — consumers who want the specific color must act immediately or miss out. Distribution decision: drops go exclusively to Stanley.com (direct channel) first because: (a) it captures full retail margin with no channel partner taking a cut; (b) it builds the direct customer

relationship (email capture, loyalty data); (c) it rewards the brand's most loyal community who monitor the site actively. Retail partners receive standard colorways later at standard wholesale terms.

3. Channel conflict response options: (a) implement minimum advertised price (MAP) policies that prohibit retail partners from advertising below a floor price; (b) create product differentiation between channels (exclusive colors or bundles for Stanley.com vs. Target's standard assortment); (c) prioritize direct channel for limited editions. A "do nothing" response risks training customers to wait for the retail discount, undermining the direct channel. The MAP policy is the industry-standard mechanism for managing this conflict.

4. The $75 resale premium ($120 - $45) signals that demand at the $45 price was far in excess of the 5,000-unit supply. If someone is willing to pay $120 for the product, Stanley's $45 price is well below the market-clearing price. This means Stanley is "leaving money on the table" in direct economic terms — but may be intentional: keeping the retail price accessible ($45) maintains mass-market desirability and social proof, while the scarcity and resale market generate additional earned media and brand heat at no cost to Stanley. The decision is strategic, not accidental.

5. A strong "no, don't expand to grocery" recommendation: grocery stores have low average transaction values, high shelf competition from commodity bottles ($8–15 price point), and a retail environment that associates the product with functional commodity use rather than aspirational lifestyle. The brand equity depends on scarcity and premium context — a Whole Foods placement next to $12 Nalgene bottles reframes Stanley as "just another water bottle." A "yes, expand" recommendation: Whole Foods specifically skews to the same affluent, health-conscious consumer who is Stanley's core customer; the premium store environment preserves brand positioning better than Kroger would. Differentiate between Whole Foods (defensible) and Kroger (damaging).

6. Three consumer behavior factors driving TikTok virality: (1) Social factors — peer influence; when trusted creators post about their Stanley, followers treat it as a social endorsement and feel social pressure to own the same item; (2) Psychological factors — the scarcity principle creates urgency and makes the product feel more desirable than it would be if freely available; (3) Personal factors — the product becomes identity-signaling for a specific lifestyle (fitness, hydration culture, "that girl" aesthetic). Implications for the next launch: seed the product with micro-influencers in the target identity community 2–3 weeks before launch; release in limited quantities to activate scarcity psychology; use a specific colorway that photographs distinctively to maximize social sharing.

Topic 2.7 · Hestia

Topic: Promotion and Marketing Communications

What the company does (public information). Hestia (depending on which Hestia is referenced — the CED case may refer to a small business in retail, hospitality, or technology) is a brand-building company. The specific Hestia in the CED case demonstrates promotion-mix decisions for a smaller business that can't compete on advertising budget alone.

Why this case fits Topic 2.7. Smaller businesses must choose promotion-mix elements carefully because budget constraints prohibit using all channels. The case illustrates how a constrained promotion budget shapes channel selection and message focus.

AP-framework concepts the case illustrates.

- Promotion mix (EK 2.7.A): advertising, personal selling, sales promotion, public relations, direct marketing

- Promotion-mix selection based on target market and budget
- Earned vs. paid media

Going in — prep before you engage with the case.

- Know the five promotion-mix elements before engaging: advertising (paid, mass-reach messaging), personal selling (direct salesperson-to-buyer interaction), sales promotion (short-term incentives — coupons, discounts), public relations (earned coverage and community relations), and direct marketing (targeted communication to a specific individual — email, mail, SMS). Know each definition precisely; the AP exam uses them to classify specific marketing activities.
- "Earned media" vs. "paid media" vs. "owned media" is the three-part framework for thinking about promotion channels. Earned = press coverage and word-of-mouth you didn't pay for. Paid = advertising and sponsorships you did pay for. Owned = your website, email list, social accounts. Small businesses must decide how much of each limited budget goes to which type.
- Budget constraints force trade-offs — the AP framework expects you to reason about opportunity cost when recommending a promotion mix for a small business.

Further reading.

- Specific verified URL not available for Hestia; multiple businesses use this name. Recommend searching "Hestia [industry context from AP Classroom case]" to find current public information.
- For promotion-mix frameworks generally, search "AP Business promotion mix small business examples" for accessible study resources.
- sba.gov/marketing — Small Business Administration publishes free marketing guidance relevant to small-business promotion decisions.
- URLs verified at time of writing; if a link breaks, search by company name.

Discussion questions (original).

1. For a small business with a $5,000 annual promotion budget, rank the five promotion-mix elements by likely ROI. Justify the top choice.
2. Earned media (PR, word-of-mouth) costs nothing in dollars but takes time. How would Hestia's choice between paid and earned media depend on its growth stage?
3. Identify one promotion-mix element that is particularly well-suited to digital small businesses today versus 20 years ago. Why has the relative value of that channel changed?
4. **Calculation/data question.** Hestia spends its $5,000 annual promotion budget as follows: $3,000 on social media advertising, $1,500 on a local PR campaign (press release writing and distribution), and $500 on sales promotion (a launch discount event). If social advertising generates 40 new customers, the PR campaign generates 15, and the sales promotion generates 25, what is the cost per customer acquired (CAC) for each channel? Which channel has the best CAC? Which has the worst?
5. **Decision/recommendation question.** Hestia has been operating for 2 years and has 200 loyal customers but limited brand awareness in the broader market. It has $8,000 to spend on promotion in Year 3. Recommend a specific allocation across the promotion mix and justify each decision using the promotion-mix framework.
6. **Cross-framework synthesis.** Apply consumer behavior factors (Topic 2.2) to Hestia's promotion decisions. If Hestia's target customer is primarily influenced by social factors (peer recommendations, community belonging), which promotion-mix element should receive the most budget, and why does that consumer behavior factor make personal selling or PR more effective than advertising in this specific case?

Answer sketches

1. Ranking for a $5,000 budget (highest to lowest ROI): (1) Direct marketing (email/social) — lowest cost per contact, measurable, scalable; (2) PR/earned media — labor cost only, high credibility multiplier; (3) Personal selling — labor-intensive but highest conversion rate for considered purchases; (4) Sales promotion — effective for short-term spikes but can train customers to wait for discounts; (5) Advertising — highest reach but requires budget at a scale a $5,000 budget cannot sustain. Top choice justification: direct marketing (email) at this budget level allows precise targeting, measurable results, and compounding returns as the list grows.

2. At launch (early stage): earned media is most valuable because the business has no customer base to generate word-of-mouth — the founder must actively pursue press coverage and community mentions to build initial awareness. At growth stage: earned media is supplemented by paid because organic reach alone cannot scale fast enough; the company now has social proof that makes paid advertising more efficient (customers can be shown proof in ads). At maturity: earned media returns as the dominant channel because the brand has enough reputation and customer advocacy to be self-sustaining.

3. Direct marketing has seen the most dramatic value increase: 20 years ago, it meant physical mail ($0.50/piece with low open rates). Today it means email ($0.001/contact with 20–40% open rates for engaged lists) and SMS (even higher engagement). The channel's value changed because: (a) the cost collapsed with digital delivery; (b) targeting became far more precise (segmented lists vs. mass mail); (c) measurement became immediate (open rate, click-through, conversion — all trackable within hours).

4. Social advertising: $3,000 / 40 customers = $75 CAC. PR campaign: $1,500 / 15 customers = $100 CAC. Sales promotion: $500 / 25 customers = $20 CAC. Best CAC: sales promotion at $20. Worst CAC: PR at $100. However, a strong answer notes that CAC alone is not the full picture — PR customers may have higher brand alignment and lower churn than discount-event customers; and the PR investment builds long-term brand equity that is not captured in immediate acquisition numbers.

5. Recommended Year 3 allocation: $3,500 (44%) to direct marketing/email — the 200 existing loyal customers are the most valuable marketing asset; building a referral program from that base is the highest-ROI activity. $2,500 (31%) to PR — earned media credibility accelerates at the 2-year mark when there are genuine customer stories to tell. $2,000 (25%) to personal selling (events, demos, community) — if the product requires demonstration or explanation, this is where conversion happens. Zero to advertising — $2,000 in digital advertising is not enough to build meaningful reach, and the budget is better used in higher-converting channels at this stage.

6. Social factors (peer recommendations, community belonging) make personal selling and PR the most effective promotion channels because: (1) personal selling replicates the social recommendation dynamic — a trusted salesperson or brand ambassador in the community is perceived like a peer recommendation, not an advertisement; (2) PR generates press coverage and community mentions that function as third-party social endorsements — they feel earned rather than bought. Advertising, by contrast, is recognized as paid and therefore carries less social credibility — for a target customer driven by social factors, a paid ad is less persuasive than a genuine community endorsement. The consumer behavior analysis directly determines the promotion-mix allocation.

UNIT 3 (Part 2) — Business Finance and Accounting

Topic 3.4 · DK Coffee Lab, Part 1

Topic: Business Expenses

What the company does (public information). DK Coffee Lab is a specialty coffee business — typically structured as a roaster + retail café. “Part 1” of the case focuses on its expense structure: how a coffee business categorizes costs (raw materials, labor, rent, utilities, equipment), and how it manages variable vs. fixed expenses.

Why this case fits Topic 3.4. A coffee shop has every textbook expense category visible: COGS (beans, milk, cups), operating expenses (rent, labor), fixed vs. variable splits, and seasonal expense variation. The case is concrete enough to teach expense classification but small enough to inspect every line.

AP-framework concepts the case illustrates.

- Business expense categorization (EK 3.4.B): COGS, operating, non-operating
- Fixed vs. variable costs (EK 3.4.B)
- Direct vs. indirect costs

Going in — prep before you engage with the case.

- Master the two-axis classification before engaging: fixed/variable (does the cost change with output volume?) AND direct/indirect (is the cost specifically traceable to a unit of product?). These are two separate questions — a cost can be fixed AND indirect (e.g., the lease) or variable AND direct (e.g., coffee beans per drink).
- Know the break-even formula: Break-even units = Fixed Costs / (Price per unit - Variable Cost per unit). You will very likely need to apply this to DK Coffee Lab’s expense structure.
- A coffee shop is one of the clearest “every cost is visible” small businesses in the AP course — take advantage of that concreteness. You should be able to classify every cost before reading the case just from common knowledge about how coffee shops operate.

Further reading.

- Specific verified URL not available for DK Coffee Lab; recommend searching “DK Coffee Lab” with a city/state context if available from AP Classroom.
- sca.coffee (Specialty Coffee Association) — publishes publicly accessible reports on the specialty coffee industry, including cost benchmarks.
- For expense classification framework practice, search “fixed variable direct indirect cost examples AP Business” for accessible study materials.
- URLs verified at time of writing; if a link breaks, search by company name.

Discussion questions (original).

1. Classify each of these DK Coffee Lab expenses: green coffee beans, the barista’s hourly wage, electricity for the espresso machine, the lease on the storefront, the digital signage subscription, and the accountant’s monthly fee. Use the fixed/variable + direct/indirect framework.

2. If DK Coffee Lab moved to a higher-rent location with more foot traffic, which expense categories change, and how would the change affect break-even?
3. Why does separating fixed and variable costs matter more for a coffee shop than for a pure-digital SaaS business? Use the framework definitions.
4. **Calculation/data question.** DK Coffee Lab sells espresso drinks at an average price of $5.50. Variable cost per drink (beans, milk, cup, lid) is $1.20. Monthly fixed costs are $8,400 (rent $3,500, staff salaries $3,800, insurance/utilities $1,100). How many drinks per month does the shop need to sell to break even? If the shop is open 26 days per month, how many drinks per day does that represent?
5. **Decision/recommendation question.** DK Coffee Lab is considering adding a food menu (pastries, sandwiches) to increase average transaction value. The food items would cost $800/month in additional fixed costs (a display case and refrigeration) and $0.60/item in variable costs, selling at $4.00 average. Should the shop add food? Use the break-even and margin logic from Q4 to justify.
6. **Cross-framework synthesis.** Connect the DK Coffee Lab expense structure (Topic 3.4) to the income statement framework (Topic 3.6). Walk through how the expense classifications from Q1 would map to specific lines on an income statement: which costs appear in COGS, which appear in operating expenses, and why that distinction matters for reading gross profit margin vs. operating profit margin.

Answer sketches

1. Green coffee beans: variable + direct (the more drinks made, the more beans used; traceable to each cup). Barista hourly wage: variable + direct (hours worked directly tied to production). Electricity for espresso machine: variable + indirect (varies with usage but not precisely traceable to each drink without metering). Storefront lease: fixed + indirect (same cost regardless of drinks sold; not traceable to a unit). Digital signage subscription: fixed + indirect (flat monthly fee regardless of sales volume). Accountant's monthly fee: fixed + indirect (overhead cost not traceable to a product unit).

2. Moving to a higher-rent location changes: (a) fixed costs rise (higher lease expense); (b) variable costs may rise if the new location requires more staff to serve higher volume. Break-even increases because the fixed cost denominator in the break-even formula is larger — more drinks must be sold before covering fixed costs. The increased foot traffic must generate enough additional revenue to more than offset the higher fixed cost base; if not, the move is unprofitable despite higher volume.

3. A coffee shop has significant variable costs (beans, milk, cups) that change with every unit produced — understanding the fixed/variable split tells the owner exactly how many drinks must be sold to cover the month. A pure-digital SaaS business has near-zero marginal cost for serving one additional user — once the software is built, the variable cost per user approaches zero. Fixed/variable classification matters most when variable costs are meaningful relative to price; for SaaS, almost all costs are fixed (developers, servers), making the framework less operationally actionable.

4. Contribution margin per drink = $5.50 - $1.20 = $4.30. Break-even = $8,400 / $4.30 = 1,953 drinks per month. Per day: 1,953 / 26 = 75.1 drinks per day. A strong answer notes that 75 drinks per day is achievable for a well-trafficked specialty coffee shop but would be difficult in a low-foot-traffic location — reinforcing why location (a fixed cost driver) is so consequential for coffee businesses.

5. The food item adds: fixed cost = $800/month; contribution margin per food item = $4.00 - $0.60 = $3.40. Additional food break-even: $800 / $3.40 = 235 food items per month (9 items per day). If the shop sells 9+ food items per day alongside existing coffee sales, the food addition is profitable and the combined break-even is manageable. A strong "add food" recommendation notes that food tends to increase average transaction value even among customers who came for coffee — the margin on the incremental food sale is high once the display case is paid for.

6. Cost-to-income statement mapping: Green coffee beans and milk → COGS (directly traced to the product revenue). Barista wages → this is a borderline case: some businesses classify direct labor in COGS (making gross profit a truer "production margin"), others classify it as operating expense. The AP framework typically places non-manufacturing direct labor in operating expenses. Lease, digital signage, and accountant fees → operating expenses (SG&A category). The distinction matters because gross profit margin = (Revenue - COGS) / Revenue — if barista wages are in COGS, gross margin looks lower; if in operating expenses, gross margin looks higher, giving a misleading picture of product economics. Students must know which line each cost belongs on and why it matters for margin analysis.

Topic 3.5 · DK Coffee Lab, Part 2

Topic: Financial Capital

What the company does (public information). "Part 2" of the DK Coffee Lab case shifts focus from expenses to financial capital — how the founder raised money to open the business, and what capital decisions the business faces as it grows.

Why this case fits Topic 3.5. A small business has every typical capital-raising option on the table: founder savings, friends and family, small-business loans, lines of credit, equity investment, crowdfunding. The case illustrates the trade-offs between debt and equity financing for a small business — particularly the cost of capital and the ownership/control implications.

AP-framework concepts the case illustrates.

- Sources of financial capital (EK 3.5.A): debt, equity, internal financing
- Cost of capital trade-offs
- Ownership and control implications of different financing choices

Going in — prep before you engage with the case.

- Know the three main sources of financial capital before engaging: debt (borrowed money that must be repaid with interest), equity (ownership stake given to investors in exchange for capital — no repayment required but ownership is diluted), and internal financing (using the business's own retained earnings). Each has different cost-of-capital and control implications.
- The "cost of capital" is not just the interest rate on debt — it includes the opportunity cost of giving up equity. Know how to compare these across a single decision.
- A small business's access to capital is typically more limited than a large corporation's. The AP framework expects you to know why: lack of credit history, insufficient collateral, unproven cash flow, and owner-personal guarantee requirements.

Further reading.

- Specific verified URL not available for DK Coffee Lab; see Topic 3.4 further reading note above.
- sba.gov/loans — the Small Business Administration's loan programs page is publicly accessible and describes SBA 7(a) loan terms relevant to this case.
- score.org — SCORE (nonprofit SBA partner) publishes free small business finance guides accessible to the public.
- URLs verified at time of writing; if a link breaks, search by company name.

Discussion questions (original).

1. DK Coffee Lab needs $80,000 to expand. Compare three financing paths: SBA loan, equity from an investor in exchange for 25% ownership, and using personal savings + a personal credit card. Identify the cost and control trade-off for each.
2. Why is debt usually “cheaper” than equity for an established business but harder to obtain for a startup? Use the framework.
3. If DK Coffee Lab were profitable enough to fund expansion from retained earnings, why might it still choose to take on debt? List two strategic reasons.
4. **Calculation/data question.** DK Coffee Lab takes an SBA loan of $80,000 at 7.5% annual interest, repaid over 5 years. (Assume simple interest for this calculation.) What is the total interest paid over the 5-year term? If the coffee shop’s annual net income is $45,000, what percentage of annual income goes to interest payments each year? Is this a sustainable debt-service level?
5. **Decision/recommendation question.** DK Coffee Lab’s founder has the option of taking $80,000 from a local angel investor who wants 30% equity, or taking the SBA loan from Q4. The founder expects the business to be worth $500,000 in 5 years. Recommend which financing path and justify using the long-term cost-of-capital comparison.
6. **Cross-framework synthesis.** Connect the capital-raising decision (Topic 3.5) to the balance sheet (Topic 3.7). For each of the three financing paths in Q1, explain how the choice affects the balance sheet: what changes on the assets side, the liabilities side, and the equity side?

Answer sketches

1. SBA loan: cost = 7.5% annual interest + origination fees; control = founder retains 100% ownership but must meet lender covenants and make regular payments. Equity investor (25% stake): cost = permanent dilution of 25% of all future profits and exit proceeds; control = investor may request board seat or veto rights on major decisions. Personal savings + credit card: savings has zero interest cost but depletes personal financial cushion; credit card debt is typically 20–29% APR — very expensive. Control is retained entirely. The correct choice depends on the business’s risk tolerance and growth trajectory.

2. Debt is cheaper for an established business because: lenders have proof of cash flow (they can calculate repayment ability from real revenue data), and interest expense is tax-deductible (reducing the net cost of debt). Debt is harder for a startup because: no credit history, no proven cash flow, and often insufficient collateral — lenders cannot assess default risk accurately. Equity is “more expensive” (permanent dilution) but more accessible for startups because equity investors accept high risk in exchange for high potential return.

3. Two strategic reasons to use debt even when internal financing is possible: (1) Preserve cash reserves — retaining cash allows the business to weather unexpected downturns (e.g., equipment failure, slow season) without being unable to meet obligations; the debt-funded expansion is self-contained. (2) Tax advantage — interest expense is deductible, reducing taxable income; using retained earnings provides no equivalent tax benefit. A third optional reason: signal confidence — securing bank debt demonstrates creditworthiness to future lenders, building the business’s borrowing capacity for larger future expansions.

4. Total interest = $80,000 × 7.5% × 5 years = $30,000. Annual interest = $6,000. Annual interest as percentage of net income = $6,000 / $45,000 = 13.3%. This is a manageable debt-service level — a business paying 13% of net income in interest still retains 87% for operations, owner compensation, and reinvestment. A strong answer notes that the loan is also repaying principal ($16,000/year), so total annual debt service = $22,000, which is $22,000 / $45,000 = 48.9% of net income — considerably more demanding and closer to the sustainability threshold.

5. Long-term cost comparison: equity path — investor gets 30% of the $500,000 exit value = $150,000. The "cost" of the equity is $150,000 in future value surrendered for $80,000 today. SBA loan path — total repayment = $80,000 principal + $30,000 interest = $110,000 over 5 years. The equity financing costs $150,000 in future value; the debt costs $110,000 in actual cash. Recommendation: the SBA loan is financially cheaper unless the investor provides strategic value beyond the capital (connections, mentorship, distribution access) that would increase the business's exit value beyond $500,000. A strong answer quantifies the break-even point at which the investor's value-add would need to raise the exit value to justify the equity cost.

6. Balance sheet effects: SBA loan: assets increase by $80,000 (cash received); liabilities increase by $80,000 (loan payable — long-term); equity unchanged. The accounting equation is balanced. Equity investor (25%): assets increase by $80,000 (cash received); liabilities unchanged; equity increases by $80,000 (additional paid-in capital). The investor now owns 25% of that equity. Personal savings: assets change as personal cash converts to business cash (no net change if contributed as equity) or a personal loan creates both a business asset and a personal liability. Credit card: business assets increase by $80,000; business liabilities increase by $80,000 (credit card payable — current liability, short-term). Each financing path produces a different liability/equity mix that permanently shapes the balance sheet structure.

Topic 3.6 · Hershey

Topic: The Income Statement

What the company does (public information). The Hershey Company is a publicly traded U.S. confectionery and snacks manufacturer (chocolate bars, candy, Reese's, etc.). As a public company, it publishes detailed financial statements that students can find in its annual reports (10-K filings) on the SEC EDGAR website.

Why this case fits Topic 3.6. Hershey is one of the cleanest income statements to learn from: a single industry (food/snacks), clearly identifiable COGS, predictable operating expenses, and steady year-over-year comparison. The case lets students inspect a real income statement and practice reading it.

AP-framework concepts the case illustrates.

- Income statement structure (EK 3.6.A): Revenue → COGS → Gross Profit → Operating Expenses → Operating Profit → Other Items → Net Income
- Profit margins: gross, operating, net
- Year-over-year analysis
- Reading a publicly filed financial document

Going in — prep before you engage with the case.

- Know the income statement structure by heart before engaging: Revenue − COGS = Gross Profit; Gross Profit − Operating Expenses = Operating Profit (EBIT); Operating Profit − Interest/Taxes = Net Income. You must be able to calculate each line from the others.
- Know how to calculate the three main profit margins: Gross Margin = Gross Profit / Revenue; Operating Margin = Operating Profit / Revenue; Net Margin = Net Income / Revenue. All expressed as percentages.
- SEC EDGAR is a free public database of all filings by publicly traded U.S. companies. Hershey's 10-K (annual report) is available there. The AP exam may ask you to interpret data from a real financial document — this case is the practice opportunity for that skill.

Further reading.

- thehersheycompany.com (Hershey's corporate investor relations page, with links to annual reports)
- sec.gov/cgi-bin/browse-edgar?action=getcompany&CIK=0000047111&type=10-K (SEC EDGAR filing page for The Hershey Company — the 10-K is free and publicly accessible)
- en.wikipedia.org/wiki/The_Hershey_Company (company history and business overview)
- macrotrends.net/stocks/charts/HSY/hershey/revenue — publicly accessible revenue and financial history for Hershey
- URLs verified at time of writing; if a link breaks, search "Hershey 10-K SEC EDGAR" to find the current filing.

Discussion questions (original).

1. Find Hershey's most recent annual 10-K filing (free on SEC EDGAR). Identify Revenue, COGS, Gross Profit, Operating Expenses, Operating Profit, and Net Income for the most recent fiscal year. Calculate gross, operating, and net profit margins.
2. Compare Hershey's gross profit margin to its operating profit margin. Which is bigger, and what does the difference tell you about the company's operating expense structure?
3. If Hershey's COGS rose 8% in a year due to cocoa price increases, by how much would operating profit fall if revenue and operating expenses stayed flat? Walk through the math.
4. **Calculation/data question.** Use these simplified Hershey figures (approximate): Revenue = $10 billion; COGS = $5.5 billion; Operating Expenses = $2.5 billion; Interest and Other = $0.3 billion; Tax Rate = 22%. Calculate: (a) Gross Profit and Gross Margin; (b) Operating Profit and Operating Margin; (c) Pre-tax Income; (d) Net Income and Net Margin.
5. **Decision/recommendation question.** Hershey's CFO is evaluating two cost-cutting options: (A) reduce advertising by $200M/year (operating expense reduction) or (B) renegotiate cocoa contracts to reduce COGS by $200M/year. Assuming both save the same dollar amount, which choice has a better effect on the income statement structure, and which poses greater long-term business risk? Recommend one and justify.
6. **Cross-framework synthesis.** Apply Porter's Five Forces (Topic 4.4) to the U.S. confectionery market in 2026. Which force is most relevant to why Hershey's COGS fluctuates with cocoa commodity prices — and what strategic move could partially insulate the income statement from that force?

Answer sketches

1. For the approximate figures: Gross Profit = $10B - $5.5B = $4.5B. Gross Margin = 45%. Operating Profit = $4.5B - $2.5B = $2.0B. Operating Margin = 20%. Pre-tax Income = $2.0B - $0.3B = $1.7B. Net Income = $1.7B × (1 - 0.22) = $1.326B. Net Margin = 13.3%. Strong answers use the actual 10-K figures, which may differ from these approximations; the skill being tested is the calculation process, not memorizing Hershey's exact financials.

2. Gross margin (45%) is always larger than operating margin (20% using the approximations above) because operating expenses are subtracted after gross profit — they can only reduce the margin, never increase it. The difference between the two margins — 25 percentage points — represents the weight of Hershey's operating expenses (SG&A, advertising, R&D, depreciation) as a percentage of revenue. A large gap means the company spends heavily on operating activities beyond production; a narrow gap means the company is operationally lean relative to its production costs.

3. If COGS rises 8%: new COGS = $5.5B × 1.08 = $5.94B. Increase in COGS = $440M. New Gross Profit = $10B - $5.94B = $4.06B. Operating Profit falls from $2.0B to $1.56B — a $440M decline. The operating profit falls by exactly the same dollar amount as the COGS increase, because revenue and operating expenses are unchanged. Net Income also falls by the after-tax amount: $440M × (1 - 0.22) = $343M less in net income. This illustrates why commodity-cost volatility is so consequential for food manufacturers.

4. See Q1 and Q3 — this question uses the same calculation framework. A strong answer shows each step in sequence: Revenue → minus COGS = Gross Profit → minus OpEx = Operating Profit → minus Interest = Pre-tax Income → apply tax rate = Net Income.

5. Both save $200M, but the income statement effect differs in structure: Option A (reduce advertising) saves $200M in operating expenses, increasing operating profit. Option B (reduce COGS) saves $200M in COGS, increasing gross profit — which also flows through to operating and net profit. The gross margin improvement from Option B is structurally more valuable because it improves the foundational production economics. However, reducing advertising poses greater long-term risk: brands like Hershey's depend on sustained advertising investment to maintain consumer demand and retailer shelf presence — cutting it risks future revenue decline. A strong recommendation chooses Option B because it preserves the revenue-generating marketing investment while improving cost structure.

6. The most relevant Five Forces factor for COGS/cocoa volatility: supplier power. Cocoa is sourced primarily from West Africa (Ivory Coast, Ghana), where a small number of producing regions and commodity markets control global supply. When weather events, political instability, or crop disease affect cocoa supply, Hershey has limited ability to substitute inputs or negotiate prices — the supplier power is high. Strategic moves to partially insulate: (a) long-term commodity forward contracts that lock in cocoa prices 1–3 years out, reducing short-term volatility; (b) vertical integration into cocoa processing or sourcing (Hershey's "Cocoa for Good" program moves in this direction); (c) product reformulation to reduce cocoa intensity in lower-margin products.

Topic 3.7 · DCH

Topic: The Balance Sheet and Net Worth

What the company does (public information). DCH (depending on the specific company in the CED — could refer to a small business or a known mid-sized entity). The case focuses on reading the balance sheet: assets, liabilities, and owners' equity.

Why this case fits Topic 3.7. A balance sheet teaches the accounting identity (A = L + E), classification of assets and liabilities (current vs. long-term), and how owners' equity changes over time. A mid-sized business case lets students inspect each line without the overwhelming complexity of a giant multinational.

AP-framework concepts the case illustrates.

- Accounting equation (EK 3.7.A): Assets = Liabilities + Owners' Equity
- Current vs. long-term asset/liability classification
- How net worth (owners' equity) changes over time
- Reading the balance sheet alongside the income statement

Going in — prep before you engage with the case.

- Memorize the accounting equation: Assets = Liabilities + Owners' Equity. Every transaction in a business affects at least two sides of this equation simultaneously — it always stays balanced. Practice this with simple transactions before engaging with the case.
- Know the current vs. long-term distinction: current assets/liabilities are expected to convert to cash or be paid within one year. Long-term assets/liabilities extend beyond one year. The classification matters for liquidity analysis.

- Understand that net worth (owners' equity) is not the same as cash or profit — a profitable business can have low owners' equity if it has high debt, and a cash-rich business can have low equity if assets are financed by liabilities. Know why.

Further reading.

- Specific verified URL not available for DCH; recommend searching "DCH [industry context from AP Classroom case]" to find current public information. Multiple businesses use the DCH name.
- For balance sheet reading generally, search "how to read a balance sheet AP Business" or visit investopedia.com/terms/b/balancesheet.asp — Investopedia's financial definitions are publicly accessible.
- accountingcoach.com — free public accounting tutorials that cover the accounting equation and balance sheet structure in accessible language.
- URLs verified at time of writing; if a link breaks, search by company name.

Discussion questions (original).

1. List five assets a small/mid-sized business like DCH would typically have. Classify each as current or long-term.
2. If a business buys $30,000 of new equipment with cash, what happens to each side of the accounting equation? Write out the change for assets, liabilities, and equity.
3. If owners' equity increases year-over-year, what are the two possible sources of that increase? Use the framework.
4. **Calculation/data question.** DCH's balance sheet shows: Total Assets = $420,000; Total Liabilities = $275,000. (a) What is Owners' Equity? (b) If the company takes out a new $50,000 loan to buy equipment, what are the new Owners' Equity, Total Assets, and Total Liabilities? (c) Calculate the debt-to-equity ratio before and after the loan. What does the change tell you about financial risk?
5. **Decision/recommendation question.** DCH is considering selling its company-owned building (a long-term asset worth $200,000) and leasing office space instead. The proceeds would be used to pay down liabilities. Recommend whether to sell, and explain the impact on the balance sheet, debt-to-equity ratio, and long-term financial flexibility.
6. **Cross-framework synthesis.** Connect the balance sheet (Topic 3.7) to the income statement (Topic 3.6). A business has $50,000 in net income in Year 1 and pays no dividends. What specifically happens to the balance sheet at year-end? Trace the net income through the retained earnings account into the owners' equity section, and explain why the balance sheet and income statement are linked.

Answer sketches

1. Five assets with classifications: (1) Cash in bank accounts — current. (2) Accounts receivable (money owed by customers) — current. (3) Inventory of finished goods — current. (4) Equipment (machinery, computers) — long-term. (5) Building or leasehold improvements — long-term. Optional addition: prepaid expenses (insurance paid in advance) — current. A strong answer classifies based on the one-year conversion rule, not intuition.

2. Buying $30,000 equipment with cash: Assets side — cash decreases by $30,000; equipment (long-term asset) increases by $30,000. Net change in assets = zero. Liabilities side — no change. Equity side — no change. The accounting equation is balanced: the transaction is an asset swap (cash converts to equipment) with no effect on liabilities or equity. This is the key demonstration that A = L + E always holds.

3. Two sources of owners' equity increase: (1) Net income — the business earned profit during the period, which is retained in the business as retained earnings (a component of equity). (2) Additional owner investment — the owner(s) contributed additional capital to the business. A strong answer notes that

dividends/owner draws decrease equity, so the net equity change depends on the combination of net income, new contributions, and distributions.

4. a. Owners' Equity = $420,000 - $275,000 = $145,000. (b) After loan: Total Liabilities = $275,000 + $50,000 = $325,000; Total Assets = $420,000 + $50,000 = $470,000 (equipment purchased); Owners' Equity = $470,000 - $325,000 = $145,000 (unchanged — the loan is debt, not equity). (c) Debt-to-equity before: $275,000 / $145,000 = 1.90. After: $325,000 / $145,000 = 2.24. The ratio increases, indicating higher financial leverage and more risk — each dollar of equity now backs more debt. Lenders use this ratio to assess default risk.

5. Selling the building: Assets decrease by $200,000 (building sold); Liabilities decrease by $200,000 (liabilities paid down with proceeds); Owners' Equity unchanged. The debt-to-equity ratio improves (liabilities fall, equity unchanged). Long-term impact: the company no longer owns an appreciating asset (the building) but eliminates real estate maintenance costs and balance sheet risk. The main risk: lease payments are now a permanent operating expense (off-balance-sheet under some older accounting standards but visible in cash flow). Recommendation depends on the business's core competency — if managing real estate is not the business, leasing is usually more efficient capital deployment.

6. Net income flows to retained earnings, which is a sub-account within Owners' Equity. Year-end journal entry: credit retained earnings by $50,000 (equity increases by $50,000). Since assets = liabilities + equity, and liabilities didn't change, assets must also increase by $50,000 — this reflects the cash or receivables that the net income generated. The link: the income statement measures performance over a period (revenues and expenses); the balance sheet captures the result at a point in time (the net income for the period either sits as cash in assets or has been used to pay liabilities, reflected in equity through retained earnings). The two statements reconcile through the retained earnings account.

Topic 3.7 · DK Coffee Lab, Part 3

Topic: The Balance Sheet and Net Worth

What the company does (public information). DK Coffee Lab is the specialty coffee business (roaster + retail café) followed across the DK Coffee Lab case series. Part 1 examined its expense structure (Topic 3.4) and Part 2 its financing decisions (Topic 3.5); "Part 3" now turns to the business's balance sheet — its accumulated assets, liabilities, and owner's equity after operating and financing choices have played out.

Why this case fits Topic 3.7. Part 3 is an *evaluation* case that carries a financial-statement supplement (paired in the CED with Hershey's income-statement supplement), so students build and read the balance sheet directly. Because DK Coffee Lab is small and every earlier decision is known — startup expenses, a loan, or an equity raise — students can trace how those transactions accumulate into the balance sheet's three sections and how net worth grows over time.

AP-framework concepts the case illustrates.

- Accounting equation (EK 3.7.A): Assets = Liabilities + Owner's Equity
- Current vs. long-term asset/liability classification
- How net worth (owner's equity) changes over time through retained earnings and owner contributions
- Reading the balance sheet as the cumulative result of income-statement and financing decisions from Parts 1–2

Going in — prep before you engage with the case.

- Bring the DK Coffee Lab facts from Parts 1 and 2 with you: the expense structure (Part 1) and the financing choice (Part 2) are exactly what shows up on this balance sheet. A loan appears as a long-term liability; an owner's contribution or retained profit appears in equity. Reconstruct where each earlier decision lands before you read.
- Memorize the accounting equation and confirm it balances after every transaction — a balance sheet that does not balance is a signal you have miscounted a line, not a valid result.
- Distinguish net worth (owner's equity) from cash and from profit. A profitable café can still show thin equity if it is carrying its expansion loan, and a café with cash in the bank can have low equity if that cash was borrowed. Know why before you engage.

Further reading.

- Specific verified URL not available for DK Coffee Lab; see the Topic 3.4 further reading note above. DK Coffee Lab is a College Board case business, so use the AP Classroom materials for the specifics.
- For balance sheet reading generally, search "how to read a balance sheet AP Business" or visit investopedia.com/terms/b/balancesheet.asp — Investopedia's financial definitions are publicly accessible.
- accountingcoach.com — free public accounting tutorials covering the accounting equation and balance sheet structure.
- URLs verified at time of writing; if a link breaks, search by company name.

Discussion questions (original).

1. Reconstruct DK Coffee Lab's balance sheet at a high level: list three likely current assets, two likely long-term assets, one current liability, and one long-term liability for a small roaster + café. Classify each and explain the one-year rule you used.
2. In Part 2, DK Coffee Lab raised expansion capital. Show where an $80,000 SBA loan versus an $80,000 equity contribution would each land on this balance sheet, and explain why owner's equity differs between the two paths even though total assets are identical.
3. If DK Coffee Lab's owner's equity rose from one year to the next, what are the two possible sources of that increase? Connect each to a decision made in an earlier part of the case.
4. **Calculation/data question.** DK Coffee Lab's balance sheet shows: Total Assets = $160,000; Total Liabilities (mostly the expansion loan) = $95,000. (a) What is owner's equity? (b) The café earns $28,000 net income for the year and the owner takes no draws — what is the new owner's equity, assuming no other changes? (c) Calculate the debt-to-equity ratio before and after that year of retained profit. What does the change tell you about the café's financial risk trajectory?
5. **Decision/recommendation question.** DK Coffee Lab could use a strong profit year to (A) pay down $40,000 of the expansion loan or (B) keep the cash on the balance sheet as a reserve. Recommend one, and trace the effect on the balance sheet, the debt-to-equity ratio, and the café's financial flexibility heading into a possible second location.
6. **Cross-framework synthesis.** Connect the balance sheet (Topic 3.7) to the income statement (Topic 3.6) using DK Coffee Lab as one continuous story. The café's $28,000 of net income (an income-statement figure) has to appear on the balance sheet. Trace it through retained earnings into owner's equity, and explain why a reader must see both statements to understand the café's true financial position.

Answer sketches

1. Current assets: cash in the register/bank, coffee and food inventory (beans, milk, cups), and any accounts receivable from wholesale/catering accounts — all expected to convert to cash within a year. Long-term

assets: the espresso machine and roaster, and leasehold improvements/furniture — used over multiple years. Current liability: accounts payable to bean and dairy suppliers (due within a year). Long-term liability: the expansion loan principal due beyond one year. Strong answers classify by the one-year conversion/payment rule rather than by intuition.

2. SBA loan: assets rise by $80,000 (cash); a long-term loan liability rises by $80,000; owner's equity is unchanged — borrowed money is not the owner's stake. Equity contribution: assets rise by $80,000 (cash); liabilities are unchanged; owner's equity rises by $80,000. Total assets are $80,000 higher either way, but the loan sits in liabilities (must be repaid, and it raises debt-to-equity) while the contribution sits in equity (no repayment, but any new investor now shares ownership). The accounting equation balances in both cases.
3. 1. Retained earnings — the café earned net income and kept it in the business (the Part 1 expense discipline that produced positive contribution margin shows up here). (2) Additional owner contribution — the owner put more personal capital in (a Part 2 financing choice). A complete answer notes that owner draws would reduce equity, so the net change reflects income plus contributions minus distributions.
4. a. Owner's equity = $160,000 – $95,000 = $65,000. (b) Retaining $28,000 of profit raises equity to $65,000 + $28,000 = $93,000, and assets rise to $188,000 (cash generated by the profit), liabilities unchanged at $95,000. (c) Debt-to-equity before = $95,000 / $65,000 = 1.46; after = $95,000 / $93,000 = 1.02. The ratio falls, meaning the café is becoming less leveraged and lower-risk as retained profit builds the owner's stake — the opposite of taking on more debt.
5. Paying down $40,000 of the loan: assets fall by $40,000 (cash used), liabilities fall by $40,000 (loan reduced), equity unchanged; debt-to-equity improves sharply and interest expense drops, but the cash cushion shrinks. Keeping the cash as a reserve: assets and equity both stay higher, debt-to-equity is unchanged, and the café is better protected against a slow season or equipment failure — but it keeps paying interest on the full loan. A strong recommendation ties the choice to the second-location plan: if expansion is imminent, retaining cash preserves the down-payment and buffer; if not, paying down debt lowers fixed obligations and strengthens future borrowing capacity.
6. The $28,000 net income flows from the bottom of the income statement into retained earnings, a sub-account of owner's equity. Year-end, equity rises by $28,000; because Assets = Liabilities + Equity and liabilities did not change, assets must also rise by $28,000 (the cash or receivables the profit generated). The income statement measures performance over the year; the balance sheet captures the cumulative position at year-end. A reader who sees only the income statement knows the café was profitable but not whether that profit is tied up in a loan or sitting as cash — only the balance sheet, reconciled through retained earnings, shows the café's true net worth.

Topic 3.8 · AANE

Topic: The Cash Flow Statement

What the company does (public information). AANE — the case demonstrates cash flow management in a real business. (AANE likely refers to a specific organization in the CED case materials; verify the current case on AP Classroom.)

Why this case fits Topic 3.8. The cash flow statement reconciles net income to actual cash. A real business example demonstrates the three sections — operating, investing, financing — and shows why a profitable business can still run out of cash, or why an unprofitable business can sometimes still be cash-positive.

AP-framework concepts the case illustrates.

- Cash flow statement sections (EK 3.8.A): operating, investing, financing activities

- Reconciliation of net income to cash from operations
- Profit vs. cash distinction

Going in — prep before you engage with the case.

- The most important concept in this topic: profit and cash are not the same thing, and the difference can kill a business. A company can be profitable (on the income statement) and simultaneously run out of cash (fail to meet payroll or vendor payments). Know why — and know the three cash flow statement sections that reveal where cash actually goes.
- The three sections of the cash flow statement: (1) Operating activities — cash generated or used by the core business operations; (2) Investing activities — cash used to buy or sell long-term assets; (3) Financing activities — cash from borrowing, repaying debt, or issuing/buying back equity. Know which section each common transaction belongs in.
- AANE is a real organization — verify the specific company from your AP Classroom access. If “AANE” refers to the Asperger/Autism Network, it is a nonprofit, which adds an interesting dimension: nonprofits have cash flow statements too, and the “profit vs. cash” distinction is even more critical when an organization cannot simply raise more equity capital.

Further reading.

- aane.org (if the case refers to the Asperger/Autism Network — publicly accessible nonprofit website with public financial disclosures)
- For nonprofits, IRS Form 990 is a public document (available via propublica.org/nonprofits — publicly accessible database of nonprofit financials). Search “AANE Form 990” for financial data.
- For cash flow statement framework, search “AP Business cash flow statement three sections” for accessible study resources.
- URLs verified at time of writing; if a link breaks, search by company name.

Discussion questions (original).

1. A business reports $100,000 net income but cash from operations of only $20,000. List three reasons that gap could exist. Use the framework.
2. Investing-activities cash flow is typically negative for a growing business. Why? When would it turn positive?
3. If a business has negative cash flow from operations for three consecutive years but is still operating, where is the cash coming from? Use the three-section structure to trace it.
4. **Calculation/data question.** AANE (or a representative organization) reports: Net Income = $80,000; Depreciation added back = $25,000; Increase in Accounts Receivable = $40,000; Increase in Accounts Payable = $15,000. Using the indirect method, calculate Cash from Operating Activities. Is cash from operations higher or lower than net income, and why?
5. **Decision/recommendation question.** AANE is profitable but its cash from operations has been negative for two consecutive quarters because accounts receivable have grown faster than collections. The CFO is deciding between (A) offering a 2% early payment discount to customers to accelerate collections, or (B) taking out a short-term line of credit to bridge the cash gap. Recommend one approach using cash flow management logic.
6. **Cross-framework synthesis.** Connect the cash flow statement (Topic 3.8) to the balance sheet (Topic 3.7). A company spends $120,000 on new equipment (investing activities cash outflow). How does this transaction appear simultaneously on the cash flow statement and the balance sheet? Walk through both documents to show the connection.

Answer sketches

1. Three reasons the net income/cash gap could exist: (a) Accounts receivable increased — revenue was recognized (income statement) but cash hasn't been collected yet from customers; (b) Depreciation — depreciation reduces net income as a non-cash expense, but no actual cash leaves the business in the period; (c) Inventory build-up — the company bought more inventory than it sold, using cash without generating revenue. All three are legitimate business activities that create a timing gap between profit recognition and cash receipt.

2. Investing activities cash flow is typically negative for growing businesses because growth requires buying long-term assets (equipment, facilities, technology). Cash outflows for asset acquisition appear in this section. Investing activities would turn positive when the company sells long-term assets — which typically happens during restructuring, downsizing, or strategic asset sales. A consistently positive investing cash flow can be a warning sign (selling assets to fund operations).

3. If operating cash flow is negative for three years but the business is still open, the cash is coming from either: (a) Financing activities — new debt (loans) or equity investments are bringing in cash to cover the operational deficit; (b) Investing activities — the company is selling long-term assets (equipment, property) to generate cash. Both are unsustainable long-term: debt must eventually be repaid, and you can only sell assets once. A business that funds operations via financing for multiple years is typically on a path to either a fundraise or failure.

4. Cash from Operating Activities (indirect method): Start with Net Income = $80,000. Add back Depreciation (non-cash expense) = +$25,000. Subtract increase in Accounts Receivable (cash not yet received) = -$40,000. Add increase in Accounts Payable (cash not yet paid to suppliers) = +$15,000. Cash from Operations = $80,000 + $25,000 - $40,000 + $15,000 = $80,000. In this example, cash from operations equals net income exactly — the depreciation add-back and payables increase exactly offset the receivables increase. A strong answer notes that the $40,000 receivables increase is a warning: if it continues growing, future cash from operations will fall below net income.

5. A strong recommendation for Option A (early payment discount): the 2% discount costs $1,600 per $80,000 in annual receivables but eliminates the need for debt and its interest cost. More importantly, it builds a sustainable collection process rather than masking the problem with borrowed cash. Option B (line of credit) is defensible if: the receivables collection problem is truly temporary (e.g., a seasonal pattern), the interest cost of the credit line is lower than the discount cost, or the organizational relationship with customers makes discount incentives awkward. The key distinction: Option A fixes the underlying problem; Option B finances it.

6. The $120,000 equipment purchase appears in two places simultaneously: Cash Flow Statement: investing activities section shows a $120,000 cash outflow (purchase of property, plant, and equipment — a standard line item). Balance Sheet: on the assets side, Cash decreases by $120,000; Equipment (long-term asset) increases by $120,000. Total assets are unchanged (asset swap). Liabilities and equity are unchanged. The cash flow statement and balance sheet are linked because the cash flow statement explains how the cash balance on the balance sheet changed during the period — the $120,000 outflow is exactly reflected as a $120,000 reduction in the cash balance shown on the balance sheet.

Topic 3.9 · Yardley

Topic: Ethics and Financial Reporting

What the company does (public information). Yardley — the case demonstrates ethics in financial reporting. (Verify the specific Yardley case on AP Classroom; the topic focuses on accounting ethics, transparency, and the consequences of misrepresentation.)

Why this case fits Topic 3.9. Financial reporting ethics is hard to teach in the abstract; a real case (or composite case based on real events like Enron, WorldCom, or Wirecard) makes the consequences concrete. The framework covers Sarbanes-Oxley (SOX), the auditor's role, and the personal/corporate consequences of misrepresentation.

AP-framework concepts the case illustrates.

- Why accurate financial reporting matters (EK 3.9.A)
- Sarbanes-Oxley Act and internal controls
- Consequences of fraud: legal, loss of trust, business failure
- The auditor's role

Going in — prep before you engage with the case.

- Sarbanes-Oxley (SOX), passed in 2002 in response to the Enron and WorldCom scandals, is the key legislation in this topic. Know its three main requirements for the AP framework: (1) CEOs/CFOs must personally certify financial statements; (2) companies must maintain internal controls and report on their effectiveness; (3) audit firms must be independent of their clients. Know why each requirement reduces fraud.
- The AP framework's three consequence categories for financial misrepresentation are: legal (criminal/civil penalties), loss of trust (investor, customer, employee), and business failure (bankruptcy, shutdown). Know the typical sequence — trust damage often precedes the legal consequence in public scandals.
- Yardley — verify the specific company from your AP Classroom access. If it refers to a composite or illustrative case, the framework concepts are the primary content.

Further reading.

- Specific verified URL not available for Yardley as an AP case company; recommend searching "Yardley [industry context]" to find current public information.
- For Sarbanes-Oxley context, search "Sarbanes-Oxley Act summary SEC.gov" — the SEC publishes accessible explainers of SOX at sec.gov.
- For accounting fraud case studies as background, search "Enron fraud summary" or "WorldCom accounting scandal" — both are extensively documented in publicly accessible journalism and Wikipedia.
- pcaobus.org — the Public Company Accounting Oversight Board (PCAOB) publishes public standards for auditors, accessible as background for auditor obligations.
- URLs verified at time of writing; if a link breaks, search by company name.

Discussion questions (original).

1. A CFO is pressured by leadership to delay recognizing $2M in expenses until next quarter to hit earnings targets. Walk through the framework's three consequence categories: legal, trust, business failure. Which is most likely first?
2. SOX requires CEOs and CFOs to personally certify financial statements. Why does this make accounting fraud harder? What incentive does it change?
3. If you were the auditor and discovered a material misstatement that leadership refuses to correct, what is your obligation? Use the framework.

4. **Calculation/data question.** A company delays recognizing $2M in expenses for one quarter. Its tax rate is 25%. (a) How much does this manipulation inflate reported net income for the quarter? (b) If the company's P/E ratio is 20x and annual earnings are $10M (with quarterly earnings $2.5M normally), by how much does the manipulation inflate the company's implied market capitalization for the quarter? Show the math.
5. **Decision/recommendation question.** You are a mid-level accountant at a company and discover that your controller has been capitalizing expenses that should be expensed (spreading them over multiple years instead of taking them in the current period). The controller claims it's "judgment," but you believe it's material misrepresentation. What do you do? Walk through the decision using the framework's ethical obligations and consequences.
6. **Cross-framework synthesis.** Connect financial reporting ethics (Topic 3.9) to management functions (Topic 4.1). The "controlling" function of management includes ensuring accurate information reporting within an organization. How does SOX's internal controls requirement specifically operationalize the controlling management function — and what happens to the controlling function when senior leaders actively circumvent it?

Answer sketches

1. The likely first consequence is loss of trust — specifically, when the manipulation becomes known (often through a restatement or whistleblower), investors, lenders, and employees immediately lose confidence in reported financials. Legal consequences (SEC investigation, criminal charges) typically take 12–36 months to materialize after discovery. Business failure (bankruptcy, shutdown) may or may not follow depending on severity. In the specific scenario: delaying $2M is illegal (GAAP violation) but the loss-of-trust consequence hits the stock price and lender relationships immediately upon disclosure — before any legal proceeding begins.

2. Before SOX, executives could claim ignorance of accounting irregularities — "I relied on the accounting team." SOX's personal certification requirement means the CEO and CFO are legally attesting that they have reviewed the financial statements and they are materially accurate. This changes the incentive structure: executives can no longer delegate fraud; they are personally liable for criminal prosecution under Section 906 if they certify knowingly false statements. The personal criminal liability (up to 20 years imprisonment) is the specific incentive change.

3. The auditor's obligation under GAAS (Generally Accepted Auditing Standards) and SOX: (a) issue a qualified or adverse audit opinion if the misstatement is material and uncorrected — this is publicly disclosed and signals serious problems to investors and regulators; (b) report to the audit committee of the board (bypassing management who refused to correct); (c) if the board fails to act, the auditor may have an obligation to resign and notify the SEC (for public companies under PCAOB rules). An auditor who certifies fraudulent statements may face professional sanctions, civil liability, and criminal charges.
4. a. Delayed expense recognition = $2M not recorded this quarter. Tax impact: $2M × 25% = $0.5M additional tax would have been saved; instead, the company pays $0.5M more tax. Net income inflated by $2M × (1 - 0.25) = $1.5M. (b) If quarterly net income is normally $2.5M, the manipulation makes it appear to be $4.0M. Annualized: $4.0M × 4 = $16M apparent annual earnings (vs. $10M actual). Market cap at 20x P/E: $16M × 20 = $320M implied market cap vs. $200M actual. The manipulation inflates implied market cap by $120M — a $120M transfer of value from future shareholders (who will discover the misstatement) to current sellers.

5. Decision framework: (a) Document your concern in writing with specific GAAP citations — this protects you legally and creates a record. (b) Escalate internally: take the concern to the controller's supervisor, the CFO, or the internal audit committee — following the chain of command first. (c) If internal escalation fails, SOX provides whistleblower protections for employees who report securities fraud to the SEC — you may report externally without legal retaliation if done in good faith. (d) If the company is publicly traded and the

misstatement is material, your continued silence could make you complicit. The ethical obligation is clear; the career risk is real but legally protected.

6. The “controlling” management function involves monitoring organizational activities to ensure they conform to plans and standards. SOX operationalizes this by: requiring documented internal controls (policies and procedures that catch errors before financial statements are issued), mandating annual evaluation of those controls by management, and requiring external auditors to independently assess control effectiveness. When senior leaders actively circumvent the controlling function (e.g., instructing accountants to misclassify expenses), they break the very mechanism designed to catch errors — leaving no check on the misrepresentation. SOX’s response is to require board-level (audit committee) oversight that is independent of senior management, specifically because senior leaders cannot be trusted to control themselves.

UNIT 4 — Management and Strategy

Topic 4.1 · Assort Health

Topic: Management and Leadership

What the company does (public information). Assort Health is a healthcare technology company. The case focuses on management decisions: how leaders structure teams, set priorities, and make resource-allocation decisions in a startup or scaling business.

Why this case fits Topic 4.1. Healthcare tech has tight regulatory constraints, complex stakeholders (clinicians, patients, payers, hospitals), and rapid technological change — making leadership decisions consequential. The case illustrates management functions (planning, organizing, leading, controlling) under high uncertainty.

AP-framework concepts the case illustrates.

- Functions of management (EK 4.1.A): planning, organizing, leading, controlling
- Leadership styles
- Decision-making under uncertainty

Going in — prep before you engage with the case.

- Know the four management functions (POLC): Planning (setting goals and determining how to achieve them), Organizing (assigning resources and responsibilities), Leading (motivating and directing people), Controlling (monitoring performance and making corrections). Know a concrete example of each for a technology company.
- Leadership styles in the AP framework typically include autocratic (leader decides alone), democratic/participative (leader involves team in decisions), and laissez-faire (leader delegates broadly). Know when each is appropriate — healthcare regulation, for example, may require more autocratic compliance-enforcement even if the broader culture is participative.
- Healthcare tech companies face a specific tension: the product must be innovative (technology) and simultaneously compliant (healthcare regulation). This tension shows up in every management function.

Further reading.

- Specific verified URL not available for Assort Health; recommend searching “Assort Health” for current public information.
- crunchbase.com — search “Assort Health” for funding and company profile information.
- For healthcare tech management context, search “healthcare startup leadership challenges” or “FDA digital health regulation” for accessible background.
- URLs verified at time of writing; if a link breaks, search by company name.

Discussion questions (original).

1. Identify how each of the four management functions (planning, organizing, leading, controlling) applies to a specific decision a healthcare tech startup CEO would face.
2. A CEO who is technically brilliant but poor at communication faces a leadership challenge. Which leadership style would best suit this CEO, and what trade-off does it accept?

3. In a regulated industry, control (the fourth management function) is unusually important. Why? What specific control mechanisms would a healthcare tech company need?
4. **Calculation/data question.** Assort Health has 12 engineers, 3 sales staff, and 2 compliance officers. The company is spending $180,000/month on payroll. The CEO wants to add a customer success team (4 people at $7,000/month each) to reduce churn. If the current monthly churn rate is 3% on a $400,000 monthly recurring revenue (MRR) base, and the customer success team is expected to reduce churn to 1.5%, what is the monthly revenue saved by reducing churn? Does it justify the $28,000/month team cost?
5. **Decision/recommendation question.** Assort Health's CEO must decide between two organizational structures: (A) functional structure (engineering, sales, compliance each in their own department) or (B) cross-functional product teams (each team has an engineer, salesperson, and compliance officer). Recommend one structure using the organizing management function and the company's stage of growth.
6. **Cross-framework synthesis.** Connect management functions (Topic 4.1) to KPI design (Topic 4.2). For each of the four management functions (planning, organizing, leading, controlling), identify one KPI that a healthcare tech CEO would use to monitor whether that function is working effectively. Explain why each KPI maps to that specific function.

Answer sketches

1. Planning: setting 12-month product roadmap priorities and allocating R&D budget across features vs. compliance work. Organizing: deciding whether engineers report by product line or functional expertise (organizing the human resources). Leading: communicating the company's mission to a team of clinicians and engineers with different professional backgrounds and motivations — this requires translating between clinical and technical language. Controlling: tracking FDA submission timelines and compliance audit results to ensure the product stays within regulatory boundaries — correcting course when milestones slip.

2. A technically brilliant but communication-poor CEO would best suit a democratic/participative style supported by strong communicators in other roles. The trade-off: participative leadership relies on the leader's ability to facilitate input from diverse stakeholders — if the CEO can't communicate effectively, the participation process may be slow or frustrating. Alternatively, a hybrid approach where the CEO focuses on technical decisions (autocratic on product) and delegates people-leadership to a strong COO is common in tech startups precisely for this reason.

3. In a regulated industry, the consequences of deviating from standards (plan) are not just competitive — they are legal (FDA enforcement, HIPAA fines, loss of certification). Controlling must catch deviations before products ship or patient data is mishandled. Specific control mechanisms for healthcare tech: (a) automated compliance testing built into the software development pipeline; (b) regular internal audits of data handling practices against HIPAA requirements; (c) a regulatory affairs officer whose sole function is monitoring adherence; (d) a "change control" process requiring compliance review for every product update before release.

4. Current monthly churn revenue loss: 3% × $400,000 = $12,000/month. After customer success team: 1.5% × $400,000 = $6,000/month. Monthly revenue saved = $12,000 - $6,000 = $6,000. Team cost = 4 × $7,000 = $28,000/month. The revenue saved ($6,000) does not justify the team cost ($28,000) in month 1. However, the value of reduced churn is compounding — each retained customer continues paying in subsequent months. A strong answer calculates the long-term CLV impact: if retained customers stay an additional 24 months on average, the monthly retained revenue grows. The payback period is the key calculation.

5. A strong recommendation for cross-functional product teams at the startup stage: (a) healthcare tech requires compliance to be embedded in every product decision — not added at the end by a separate department; (b) cross-functional teams make faster decisions because they don't need to cross departmental boundaries for approvals; (c) at 17 people, the company is too small for functional silos to be efficient. The cost: cross-

functional teams require generalist thinking and strong team coordination — specialists in functional departments may develop deeper expertise. The organizing decision should reflect the company's priority: speed-to-market vs. depth-of-specialization.

6. Planning KPI: percentage of product roadmap milestones delivered on schedule — measures whether plans are realistic and execution follows them. Organizing KPI: employee role clarity score (surveyed quarterly) or time-to-fill open positions — measures whether organizational structure is placing the right resources in the right places. Leading KPI: employee Net Promoter Score (eNPS) or voluntary turnover rate — measures whether leadership is motivating and retaining people. Controlling KPI: number of compliance incidents per quarter or audit findings per review cycle — measures whether the controlling mechanisms are catching deviations before they become regulatory problems.

Topic 4.1 · Canva

Topic: Management and Leadership

What the company does (public information). Canva is an Australian-founded online graphic-design platform launched in 2013 by Melanie Perkins, Cliff Obrecht, and Cameron Adams. Its drag-and-drop tools let non-designers create presentations, social posts, and marketing materials from templates. Canva grew from a small startup into one of the world's most valuable private software companies, serving individuals, small businesses, schools, and large enterprises through a freemium model.

Why this case fits Topic 4.1. Canva is a leadership-and-scaling story: co-founder and CEO Melanie Perkins built the company from a rejected pitch into a global organization of thousands of employees. The case illustrates the management functions (planning, organizing, leading, controlling) and leadership style required to scale a founder-led company — setting a durable mission ("empower everyone to design"), organizing a rapidly growing workforce, and leading through hypergrowth while keeping culture intact.

AP-framework concepts the case illustrates.

- Functions of management (EK 4.1.A): planning, organizing, leading, controlling — at scale
- Leadership styles and founder-CEO leadership through hypergrowth
- Mission- and vision-driven leadership as an organizing force
- Delegation and organizational structure as headcount multiplies

Going in — prep before you engage with the case.

- Know the four management functions (POLC) and be ready to give a Canva-specific example of each: Planning (the long-run "empower the world to design" mission and product roadmap), Organizing (structuring thousands of employees across design, engineering, and go-to-market), Leading (Perkins motivating and retaining talent through rapid growth), Controlling (tracking activation, retention, and unit economics of the freemium funnel).
- Understand the founder-CEO transition problem: the leadership skills that launch a company (persuasion, product vision) are not the same as those that run a 3,000-person organization (delegation, systems, hiring leaders). Watch for how the case handles this shift.
- Canva was famously rejected by investors many times before succeeding. Persistence and the ability to communicate a vision are leadership traits worth naming — distinct from day-to-day management. Keep the leadership-vs-management distinction sharp.

Further reading.

- canva.com (company website — product, mission, and About pages)
- en.wikipedia.org/wiki/Canva (company history, founders, funding milestones)
- forbes.com — search "Melanie Perkins Canva" for accessible founder and business profile coverage
- linkedin.com/company/canva — public company profile with employee count and structure
- URLs verified at time of writing; if a link breaks, search by company name.

Discussion questions (original).

1. Apply the four management functions (planning, organizing, leading, controlling) to a specific decision Melanie Perkins would face while scaling Canva from 100 to 1,000 employees. Give one concrete example per function.
2. The leadership skills that got Canva funded (vision, persistence through rejection) differ from those needed to run a large organization. Which management function becomes hardest as a founder-led company scales, and why?
3. Canva's freemium model means most users pay nothing. How does that business model shape which KPIs leadership must "control" to know the company is healthy? Name two.
4. **Calculation/data question.** Suppose Canva has 170 million monthly active users, of whom 2% convert to a paid plan averaging $120 per year. (a) How many paying users is that? (b) What is the resulting annual subscription revenue? (c) If a leadership initiative raises the conversion rate from 2.0% to 2.3%, how much additional annual revenue does that 0.3-percentage-point improvement generate? What does the size of that number tell you about why conversion is a leadership-level KPI?
5. **Decision/recommendation question.** Canva's leadership must decide whether to (A) keep a flat, product-led organization that has worked so far, or (B) add a layer of senior functional leaders (VPs of Engineering, Sales, Design) to manage growing teams. Recommend one using the organizing function and the company's stage of growth, and name the main risk of the option you did not choose.
6. **Cross-framework synthesis.** Connect management and leadership (Topic 4.1) to strategy and decision making (Topic 4.3). Canva expanded from individual users into large enterprise customers. How should the leadership team's decision-making process differ when entering the enterprise segment, and which management function is most stressed by that strategic move?

Answer sketches

1. Planning: setting a multi-year product roadmap and the hiring plan that supports 10× growth. Organizing: deciding whether teams are structured by product line, by function, or as cross-functional "squads," and assigning clear ownership as headcount multiplies. Leading: communicating a consistent mission so that employees hired in year 8 share the founding purpose of employees from year 1 — protecting culture through scale. Controlling: monitoring activation, retention, and paid-conversion metrics, and correcting course (e.g., reallocating engineers) when a metric drifts. Strong answers keep each example specific to a scaling software company.
2. Organizing and, closely related, leading become hardest. Early on the founder can make most decisions personally; at 1,000 people the founder must delegate through a management layer and trust systems rather than direct oversight. The function that breaks first is usually organizing — an unclear structure creates duplicated work, slow decisions, and accountability gaps. The founder's challenge is to install leaders and processes without losing the speed and vision that made the company successful.
3. Because most users are free, leadership cannot control on revenue alone. Two model-appropriate KPIs: (1) free-to-paid conversion rate — the single lever that turns a large free base into revenue; (2) net revenue retention / churn among paying users — whether existing customers expand or leave. Activation rate (share

of new users who create and share a first design) is a strong additional leading indicator, because it precedes both retention and conversion.

4. a. Paying users = 170,000,000 × 2% = 3,400,000. (b) Annual revenue = 3,400,000 × $120 = $408,000,000. (c) At 2.3%, paying users = 170,000,000 × 2.3% = 3,910,000; revenue = 3,910,000 × $120 = $469,200,000. Additional revenue from the 0.3-point lift = $469,200,000 – $408,000,000 = $61,200,000. A three-tenths-of-a-point change is worth roughly $61 million a year — which is exactly why conversion sits at the leadership/board level, not buried in an operational dashboard.
5. A strong recommendation for adding functional leaders (B): at large scale a flat structure overloads the founders and slows decisions; senior VPs let the company make faster, better-informed functional decisions and give employees clear managers and growth paths. The main risk of B is added bureaucracy and slower cross-team coordination if layers are added faster than they are needed. A defensible case for staying flat (A) argues that product-led structures preserve speed and that premature hierarchy adds cost and politics — but this becomes untenable past a certain headcount. The organizing decision should track the company's growth stage.
6. Enterprise customers require security reviews, procurement cycles, contracts, and account management — a fundamentally different decision-making process from the fast, data-driven experimentation that works for individual users. Leadership must add slower, more deliberate, multi-stakeholder decision-making (and likely a dedicated enterprise sales organization) alongside the existing product-led motion. The organizing function is most stressed: the company must stand up new roles and structures (enterprise sales, security, customer success) without disrupting the consumer business that funds the expansion.

Topic 4.2 · BREAUX Capital

Topic: Evaluating Performance Using KPIs

What the company does (public information). BREAUX Capital is a financial services / community-finance company focused on Black financial wellness. The business model relies on member acquisition, engagement, and retention — making KPI design central to the business.

Why this case fits Topic 4.2. A member-based community-finance business has clear KPIs across acquisition, engagement, retention, and financial outcomes — every category the AP framework discusses. The case lets students design KPIs that map to specific business goals.

AP-framework concepts the case illustrates.

- KPI definition and purpose (EK 4.2.A)
- Lagging vs. leading indicators
- KPI design: SMART criteria applied to metrics
- Goodhart's Law: when KPIs become targets, they stop being good measures

Going in — prep before you engage with the case.

- Know the distinction between leading indicators (predict future performance — they precede outcomes) and lagging indicators (measure past performance — they confirm outcomes). Revenue is lagging; pipeline growth is leading. The AP framework tests whether students can correctly classify a metric.
- The AP framework's KPI design criteria: KPIs should be Specific (exactly what is being measured), Measurable (can be tracked objectively), Achievable (realistic given resources), Relevant (tied to the actual

business goal), and Time-bound (has a deadline or measurement period). Apply SMART to metrics, not just goals.

- BREAUX Capital's mission (Black financial wellness) creates a measurement challenge: the ultimate outcome is improvement in financial health — which is difficult to measure and occurs over years — while the available data (account openings, app logins, course completions) are activity proxies. Know the difference between measuring activity and measuring impact.

Further reading.

- Specific verified URL not available for BREAUX Capital; recommend searching "BREAUX Capital financial wellness" for current public information.
- For KPI frameworks generally, search "leading vs lagging indicators business examples" or "Goodhart's Law explained" for accessible resources.
- cfainstitute.org — the CFA Institute publishes free articles on investment performance measurement that apply to financial services KPIs.
- URLs verified at time of writing; if a link breaks, search by company name.

Discussion questions (original).

1. Design three KPIs for BREAUX Capital — one acquisition KPI, one engagement KPI, one financial outcome KPI. For each, identify whether it's leading or lagging and what specific number target would be appropriate.
2. KPIs can backfire when employees optimize the metric instead of the underlying goal. Identify one KPI you proposed in Q1 that's at risk of this, and how you'd protect against it.
3. Why is a financial-wellness business particularly challenging to measure with KPIs? Connect to the difference between activity metrics and outcome metrics.
4. **Calculation/data question.** BREAUX Capital has 2,400 members. Monthly churn (members leaving) is 4%. The company acquires 80 new members per month. (a) How many members does the company lose per month to churn? (b) Is the company's membership growing or shrinking? (c) What new member acquisition rate would be needed to grow membership by 10% over 12 months?
5. **Decision/recommendation question.** BREAUX Capital's engagement KPI (monthly active users as a % of total members) is 28%, below the target of 40%. The team is debating whether to send daily push notifications to inactive users (which would boost the metric short-term) or redesign the app's core experience to make it more valuable (which would take 6 months and cost $80,000). Recommend one approach using KPI design and Goodhart's Law logic.
6. **Cross-framework synthesis.** Connect KPI design (Topic 4.2) to strategic decision-making (Topic 4.3). BREAUX Capital is deciding whether to expand into tax preparation services for members. Design one KPI for each phase of that strategic decision: (a) a leading KPI to inform the expansion decision before committing; (b) a lagging KPI to evaluate success 12 months after launch.

Answer sketches

1. Acquisition KPI: "New member sign-ups per month" — leading indicator (predicts future member base growth); target = 100 new members/month. Engagement KPI: "Monthly active users (MAU) as a % of total members" — lagging (measures current engagement level); target = 40% MAU rate. Financial outcome KPI: "Average member credit score improvement after 12 months" — lagging (measures actual financial wellness impact); target = +25 point average improvement. A strong answer identifies the leading/lagging classification and provides a specific numerical target for each.

2. The acquisition KPI (new sign-ups per month) is most at risk: employees could game it by signing up members who have no genuine interest (e.g., offering prizes for sign-up), inflating the count without adding real value. Protection: pair the acquisition KPI with a 90-day retention KPI — if new sign-ups don't stay past

90 days, the acquisition metric is not achieving the underlying goal. This is Goodhart's Law: the metric becomes worthless as a measure of goal achievement once it becomes the target of optimization.

3. Financial wellness is an outcome — improvement in a person's actual financial situation (debt reduced, savings increased, credit score improved). Most trackable KPIs for BREAUX Capital are activities — app logins, course completions, webinar attendance. The challenge: a member could log in daily and complete every course without improving their financial situation at all. Activity metrics are cheap to optimize; outcome metrics are expensive to improve. A strong answer identifies at least one activity metric and one outcome metric and explains the relationship and gap between them.
4. a. Monthly churn: 4% × 2,400 = 96 members lost per month. (b) Net member change: 80 new - 96 churned = -16 per month. The company is losing 16 members per month — membership is shrinking. (c) To grow membership 10% in 12 months: target membership = 2,400 × 1.10 = 2,640. Members needed by month 12 = 2,640. Over 12 months, churn rate will remove approximately 4% × average membership per month — this requires solving iteratively or estimating: if membership is roughly 2,400 throughout, churn = 96/month × 12 = 1,152 members lost. New members needed = 1,152 + 240 (net growth) = 1,392/year = 116 new members per month. A strong answer shows the logic even if the iterative calculation is simplified.
5. A strong recommendation for the app redesign (Option B): daily push notifications to inactive users would temporarily increase the MAU metric without addressing why users are inactive — a textbook Goodhart's Law failure. The 6-month redesign is more expensive but addresses the underlying issue. If inactive users don't find the app valuable, no notification frequency will sustain engagement long-term. The $80,000 investment should be compared to the value of the engagement gap: if closing the engagement gap from 28% to 40% retains X members for Y months, the CLV calculation should justify the investment.
6. a. Leading KPI to inform the expansion decision: "Number of members who express interest in tax preparation services when surveyed" — measures demand before committing capital. Target: if 20%+ of members express interest, the serviceable market is large enough to justify investment. (b) Lagging KPI to evaluate success 12 months post-launch: "Revenue from tax preparation services per member served" — measures actual financial performance of the new service. Target: the service should generate at least $300/member served to cover the incremental operational cost. The leading KPI tests the hypothesis; the lagging KPI confirms (or denies) it in practice.

Topic 4.3 · ExpressionMed

Topic: Strategy and Decision Making

What the company does (public information). ExpressionMed makes adhesive patches for continuous glucose monitors (CGMs). The business sits at the intersection of medical devices and consumer customization (decorative patches that secure CGM sensors). The case focuses on strategic decisions: which markets to enter, which product lines to expand, and how to compete in a niche category.

Why this case fits Topic 4.3. A small specialty company faces real strategic-choice problems with binary options: enter a new market or focus; product-line extension or focus; B2B partnerships or D2C. The case lets students apply decision criteria to a specific real business.

AP-framework concepts the case illustrates.

- Strategic decision-making (EK 4.3.A): identifying options, establishing criteria, comparing, recommending
- Decision criteria: financial impact, time horizon, risk, alignment with mission
- Trade-offs as the heart of strategy

Going in — prep before you engage with the case.

- The AP framework's strategic decision-making process has four steps: (1) identify the options; (2) establish decision criteria; (3) evaluate options against each criterion; (4) recommend with justification. Know these steps by name and apply them sequentially — the exam expects you to use this structure.
- Understand what a niche competitive advantage means: ExpressionMed competes not on cost but on depth of expertise in a very specific product category (CGM adhesive patches). The competitive advantage is vulnerable to two threats: (a) expansion by the CGM manufacturers themselves (vertical integration by Dexcom, Abbott), and (b) generic commodity entry as the category matures.
- CGMs (continuous glucose monitors) are worn by people with diabetes. The consumer here is a patient managing a chronic condition — which affects both the purchasing decision dynamics (not purely price-driven, also driven by skin sensitivity, comfort, and reliability) and the marketing channels (healthcare providers, patient communities, diabetes advocacy organizations).

Further reading.

- expressionmed.com (company website, full product line and brand story)
- en.wikipedia.org/wiki/Continuous_glucose_monitor (background on the CGM category and market)
- diabetesdaily.com or beyondtype1.org — accessible patient community resources where ExpressionMed-type products are discussed
- For the CGM market size and growth, search "continuous glucose monitor market size 2026" for accessible market research summaries.
- URLs verified at time of writing; if a link breaks, search by company name.

Discussion questions (original).

1. ExpressionMed must decide whether to expand from CGM patches to insulin pump patches. Establish three decision criteria and compare the options.
2. A small specialty company's competitive advantage often comes from niche depth. What strategic decision could erode that advantage even if it's financially attractive in the short term?
3. The CGM market is growing rapidly. How does growth affect the relative weight of "speed to enter new sub-markets" vs. "deepen current niche" in strategic decision-making?
4. **Calculation/data question.** ExpressionMed sells CGM patches at $24.99 for a 10-pack ($2.50/patch). A CGM user replaces a patch every 10 days (with their sensor change). Calculate: (a) How many patches does a single CGM user buy per year? (b) What is the annual revenue per customer? (c) If the company has 15,000 active customers and wants to reach $5M in annual revenue, what average annual revenue per customer would be needed — and is this achievable with the current product alone?
5. **Decision/recommendation question.** ExpressionMed's largest competitor (a generic overseas manufacturer) has begun selling CGM patches at $0.80/patch ($8.00 for 10). ExpressionMed's patches cost $2.50. Should ExpressionMed respond by: (A) cutting price to match, (B) emphasizing product quality differentiation and holding price, or (C) launching a premium product tier at a higher price? Recommend one using strategy and competitive advantage logic.
6. **Cross-framework synthesis.** Apply Porter's Five Forces (Topic 4.4) to ExpressionMed's market. Which force does the generic overseas competitor represent — and which force poses an even greater long-term threat (Dexcom or Abbott deciding to manufacture their own branded patches)? How should ExpressionMed's strategy differ in response to each threat?

Answer sketches

1. Three decision criteria: (a) Market size — how large is the insulin pump patch market compared to CGM patches? (b) Product overlap — how much of ExpressionMed's existing materials, design expertise, and manufacturing process transfers to insulin pump patches? (c) Competitive intensity — are there already dominant players in insulin pump patches, or is the market underserved? Evaluation: if the market is large, the product transfer is high, and competition is low, expansion is attractive. If any one criterion fails (e.g., the market is already dominated by a well-funded competitor), the case for expansion weakens.

2. Strategic decisions that could erode a niche advantage while being short-term financially attractive: (a) taking a large private-label contract that diverts production capacity from the branded product and trains customers that the product is a commodity; (b) entering too many adjacent niches (insulin pumps, hearing aids, medical device patches broadly) simultaneously, diluting R&D and customer service quality in the original niche; (c) pursuing mass-market retail distribution that changes the brand's positioning from specialist to commodity. The common thread: strategies that increase revenue in the short term by commoditizing the very thing that creates the niche advantage.

3. Rapid market growth changes the strategic calculus: in a growing market, the opportunity cost of not entering adjacent sub-markets is high (you let competitors establish positions in segments that will be large later). Growth compresses the "deepen current niche" advantage because competitors enter the primary market, reducing margins over time — making a diversified portfolio of niches more valuable than maximum depth in one. However, for a small company with limited resources, trying to enter multiple sub-markets simultaneously risks executing none well. The growth-rate-adjusted answer: enter the highest-probability adjacent segment first (insulin pump patches), establish defensible depth there, then consider further expansion.

4. a. A CGM user replaces every 10 days: 365 / 10 = 36.5 sensor changes per year, so approximately 37 patches per year. (b) Annual revenue per customer: 37 patches / 10 per pack × \$24.99 = 3.7 packs × \$24.99 = \$92.46/year. (c) Target revenue: \$5,000,000. At 15,000 customers: \$5,000,000 / 15,000 = \$333.33 needed per customer per year. Current revenue per customer = ~\$92.46. The gap is substantial — ExpressionMed would need either 3.6x more customers (54,000 active) or a major price increase or accessory products to reach \$5M with the current product alone. This calculation is why product line expansion (insulin pump patches, decorative overlays, etc.) is strategically essential.

5. A strong recommendation for Option B (hold price, emphasize quality differentiation): cutting price to match a \$0.80/patch generic would destroy ExpressionMed's margin structure — their cost to produce is likely close to \$1.00/patch, leaving no room at \$0.80. The customers who care only about price were never ExpressionMed's core customer — they will defect regardless. ExpressionMed's core customer values: skin compatibility testing, decorative design options, and the diabetes community brand trust. A strong Option C (premium tier) argument: creating a higher-priced professional/medical-grade tier signals quality superiority and captures the most value-sensitive customers.

6. The overseas generic competitor represents the threat of competitive rivalry — specifically, price competition from low-cost players that are difficult to match on cost structure. This is typically the most immediately visible threat. Dexcom or Abbott manufacturing their own patches represents the threat of backward integration by suppliers — technically a supplier power threat (the CGM sensor manufacturers could forward-integrate into accessories). This second threat is more existential: if Dexcom builds and sells its own patches, it has a distribution and brand advantage that ExpressionMed cannot match. Strategy against generic rivals: emphasize design, community, and product quality that commodity manufacturers cannot replicate. Strategy against manufacturer integration: build switching costs (subscription programs, custom designs, size libraries) that make the branded patch relationship sticky even if the sensor manufacturer enters.

Topic 4.4 · Crepes & Waffles

Topic: Strategic Frameworks: Porter's Five Forces and SWOT Analysis

What the company does (public information). Crepes & Waffles is a Colombian-founded restaurant chain with locations across Latin America and a stated commitment to hiring single mothers and women in difficult circumstances. The chain blends premium fast-casual food with social mission.

Why this case fits Topic 4.4. A restaurant chain with both a clear strategic position (premium casual) and a social mission lets students apply Porter's Five Forces (industry competition) AND SWOT (internal strengths/ weaknesses, external opportunities/threats) to the same business. The mission element adds nuance to "strengths" and "opportunities" that pure-profit businesses lack.

AP-framework concepts the case illustrates.

- Porter's Five Forces (EK 4.4.A): threat of entrants, supplier power, buyer power, threat of substitutes, competitive rivalry
- SWOT analysis (EK 4.4.C/4.4.D): internal S/W + external O/T
- Using both frameworks together for strategic insight

Going in — prep before you engage with the case.

- Know Porter's Five Forces by name and definition: (1) Threat of new entrants (how easy is it for a new competitor to enter?); (2) Supplier power (how much leverage do suppliers have over the business?); (3) Buyer power (how much leverage do customers have?); (4) Threat of substitutes (are there alternative ways to meet the customer need?); (5) Competitive rivalry (how intense is competition among existing players?). Know how to assess the strength of each force.
- SWOT has a critical internal/external distinction: Strengths and Weaknesses are INTERNAL (things within the company's control); Opportunities and Threats are EXTERNAL (things in the environment the company cannot control). Many students mix these up — a very common error on the AP exam.
- Crepes & Waffles was founded in Colombia in 1980 by Beatriz Fernandez. It is Latin America's oldest and largest crepe chain. Its social mission — hiring single mothers and women in difficult circumstances — is publicly documented. Know this before engaging with the case.

Further reading.

- crepes.com.co (company website — Colombian-based; available in Spanish and English)
- en.wikipedia.org/wiki/Crepes_%26_Waffles (company history and mission documentation)
- For Porter's Five Forces framework, search "Porter's Five Forces restaurant industry" for accessible examples
- theatlantic.com or businessinsider.com — search "Crepes Waffles Colombia mission hiring" for accessible English-language coverage
- URLs verified at time of writing; if a link breaks, search by company name.

Discussion questions (original).

1. Apply Porter's Five Forces to the premium fast-casual restaurant industry. Which force is strongest in 2026? Which is weakest?
2. Run a SWOT on Crepes & Waffles. Make sure each S, W, O, and T is specific to this company rather than generic to the restaurant industry.

3. The company's social mission (hiring single mothers) is a strength in SWOT — but does it also limit the company's options? Identify one strategic move it can't make because of the mission.
4. **Calculation/data question.** Crepes & Waffles operates approximately 30 locations across Latin America. Assume each location generates $800,000 in annual revenue with a 12% net profit margin. (a) What is the total annual revenue across the chain? (b) What is total annual net income? (c) If opening a new location costs $450,000 in capital investment, what is the payback period (in years) for one new location, assuming it immediately reaches average profitability?
5. **Decision/recommendation question.** Crepes & Waffles is evaluating expansion into the U.S. market (Miami, which has a large Colombian diaspora). The U.S. market offers higher average customer spend but also higher operating costs and intense competition. Recommend whether to expand, and justify using both SWOT (which quadrant drives the decision?) and Porter's Five Forces (which force is most concerning in the U.S.?).
6. **Cross-framework synthesis.** Connect the strategic frameworks in Topic 4.4 to the idea-generation framework in Topic 1.4. The founder of Crepes & Waffles identified a gap in the Colombian fast-casual market and built a social mission into the original business idea. Using the idea-generation methods (observe, interview, survey, research, experiment), hypothesize what evidence the founder likely gathered — and then use the SWOT framework to show how those original observations became strengths and opportunities in the mature business.

Answer sketches

1. Strongest force in the premium fast-casual industry in 2026: competitive rivalry — the segment is highly crowded (Chipotle, Panera, Shake Shack, numerous regional players), differentiation is difficult to sustain, and price competition has intensified post-pandemic as consumers tightened food budgets. Second strongest: threat of substitutes — delivery apps and meal kits have expanded the substitutes available (consumers can have restaurant-quality food at home). Weakest force: supplier power — food ingredients are broadly sourced commodity inputs, and restaurant chains can often switch suppliers without significant switching costs.

2. SWOT specific to Crepes & Waffles: Strength — 40+ years of brand equity and a proven unit economics model in Latin America; hiring mission creates a differentiated culture and earned media advantage. Weakness — menu is culturally specific (crepes/waffles) with limited expansion flexibility; geographic concentration in Latin America creates regional economic risk. Opportunity — Colombian diaspora communities in U.S. and European cities represent an underserved market for authentic Colombian fast-casual. Threat — fast-casual competition in any new market entered will include well-funded incumbents with existing customer loyalty and lower marketing costs.

3. The mission constrains at least one strategic move: automating kitchen operations. If the social mission is to hire and develop women in difficult circumstances, replacing kitchen labor with automation would directly contradict the founding purpose. This makes Crepes & Waffles structurally unable to pursue the labor-cost reduction strategy available to purely profit-driven competitors — a real competitive disadvantage in a labor-intensive industry facing rising minimum wages.
4. a. Total annual revenue: 30 locations × $800,000 = $24,000,000. (b) Total net income: $24,000,000 × 12% = $2,880,000. (c) New location payback: $450,000 capital investment / ($800,000 × 12% = $96,000 annual net income) = 4.69 years. A strong answer notes that 4.69-year payback is reasonable for a restaurant investment (industry standard is often 3–7 years), meaning expansion is financially viable if new locations can reach average profitability quickly.

5. SWOT perspective: the Colombian diaspora in Miami is an Opportunity (external) that aligns with the company's Strength (authentic Colombian identity and 40-year brand history). This is a Strength-Opportunity (SO) strategy — using internal strengths to capture external opportunities. Porter's Five Forces: the most

concerning force in U.S. fast-casual is competitive rivalry (already fierce), but the specific concern for Crepes & Waffles is that U.S. consumers don't know the brand, which means buyer power is high (they have no brand loyalty to Crepes & Waffles) and customer acquisition costs will be elevated. A strong recommendation acknowledges this risk and proposes entering via the diaspora community first — lowering CAC by targeting customers who already know the brand — before attempting mainstream U.S. expansion.

6. Idea-generation evidence the founder likely gathered: Observation — saw that Colombian fast-casual options were limited to traditional comida corriente with no premium positioning; Interviews — spoke with women seeking employment who lacked formal work history; Research — studied European crepe culture and identified a format with broad appeal that could be executed in a fast-casual format at accessible price points. How those observations became SWOT: the observation of a market gap became an Opportunity (no premium fast-casual competitor in 1980 Colombia); the interviews with potential employees became the foundation of the hiring mission, which became a Strength (differentiated culture and press attention); the European crepe research became the product innovation, which became a Strength (distinctive menu in a commoditized market). The idea-generation process is literally the creation of the SWOT's strength and opportunity columns.

Topic 4.4 · Square Meal Feeds

Topic: Strategic Frameworks: Porter's Five Forces and SWOT Analysis

What the company does (public information). Square Meal Feeds is a College Board *decision-making* case built for Topic 4.4. In it, a business faces a strategic choice and students are asked to weigh internal and external factors and recommend a course of action. Because it is a course case rather than a public company, the specifics live in the AP Classroom materials; treat "what the company does" as whatever the AP-provided case establishes, and use this file to prepare the SWOT and Five Forces analysis you will bring to that case.

Why this case fits Topic 4.4. The case is the CED's and Development Guide's designated vehicle for decision-making skills (Skill Category 3): students identify the internal and external factors affecting the business (the raw material of a SWOT), evaluate two strategic options using a structured decision model (the PACED framework the Development Guide names), and recommend a decisive course of action with reasoning and evidence. SWOT organizes the factors; Porter's Five Forces explains the external competitive pressure behind the "opportunities" and "threats."

AP-framework concepts the case illustrates.

- SWOT analysis (EK 4.4.C/4.4.D): sorting internal Strengths/Weaknesses from external Opportunities/Threats
- Porter's Five Forces (EK 4.4.A): threat of entrants, supplier power, buyer power, threat of substitutes, competitive rivalry
- Structured decision making (PACED: Problem, Alternatives, Criteria, Evaluate, Decide) applied to a strategic choice
- Turning framework analysis into a defensible recommendation with evidence

Going in — prep before you engage with the case.

- Keep the SWOT internal/external split sharp: Strengths and Weaknesses are *internal* (within the firm's control); Opportunities and Threats are *external* (in the environment). Mislabeling these is the most common Topic 4.4 error, and this decision case will punish it directly because your recommendation flows from correct classification.

- Learn the PACED decision model before you engage: state the Problem, list Alternatives, define the Criteria that matter, Evaluate each alternative against those criteria, and Decide. The case gives you two strategic options — your job is to evaluate both and commit to one with reasons, not to hedge.
- Use Porter's Five Forces to pressure-test the external half of your SWOT: an "opportunity" is only real if the competitive forces (rivalry, entrants, substitutes, buyer/supplier power) allow the firm to capture it. Name which force most constrains each option.

Further reading.

- Specific verified URL not available — Square Meal Feeds is a College Board case; use the AP Classroom materials as the authoritative source for the scenario.
- For the frameworks, search "Porter's Five Forces explained" and "SWOT internal external examples" for accessible study resources.
- For the decision model, search "PACED decision-making model" — it is widely documented in publicly accessible personal-finance and business-education material.
- URLs verified at time of writing; if a link breaks, search by company name.

Discussion questions (original).

1. Before deciding anything, build a SWOT for the business in the Square Meal Feeds scenario. Make each S, W, O, and T specific to the case facts, and double-check that nothing internal is sitting in the O/T columns (or vice versa).
2. The case presents two strategic options. State the decision Problem in one sentence, then list the three or four Criteria you would use to evaluate the options. Why do the criteria you chose matter more than the ones you left out?
3. Apply Porter's Five Forces to the external environment in the case. Which single force most constrains the more attractive-looking option, and how does that change your recommendation?
4. **Calculation/data question.** Suppose Option A requires $60,000 of new investment and is projected to add $25,000 per year in profit; Option B requires $20,000 and is projected to add $12,000 per year. (a) Compute the simple payback period for each. (b) Compute the first-year return on investment (annual profit ÷ investment) for each. (c) Which option looks better on payback, which looks better on ROI, and what does the split tell you about why a single financial metric should not decide a strategic choice on its own?
5. **Decision/recommendation question.** Using the PACED model, walk from Problem to Decision for the two options and recommend one. Your answer must (a) state the decision criteria explicitly, (b) evaluate both options against them using at least one SWOT factor and one Five Forces factor, and (c) commit to a single course of action with persuasive reasoning — no hedging.
6. **Cross-framework synthesis.** Connect strategic decision making (Topic 4.4) to KPI design (Topic 4.2). Once you have recommended an option, name the two KPIs you would track to know within the first year whether the decision is working, and explain why each is a *leading* indicator of the strategic outcome rather than a lagging one.

Answer sketches

1. A strong SWOT is case-specific and correctly sorted. Strengths and Weaknesses describe the business itself (e.g., an established customer base, a thin cash cushion, a capacity constraint); Opportunities and Threats describe the environment (e.g., a growing market segment, a new competitor, input-cost inflation, a regulatory shift). The self-check: if you can change it by an internal decision, it is S/W; if it happens to the firm from outside, it is O/T.
2. Problem statement: a single sentence naming the choice the business must make (e.g., "Should the business pursue Option A or Option B to grow profitably given limited capital?"). Sensible criteria: expected profitability/

return, capital required and risk, fit with existing strengths, and durability against competitive response. Those criteria matter because they combine financial return with strategic fit and risk — leaving out "fit with strengths" or "competitive response" would let a financially attractive but strategically fragile option win on paper.

3. Answers should name a specific force and tie it to an option. Example: if the attractive option is entering a segment with low barriers to entry and many substitutes, the threat of new entrants and substitutes caps the profit the firm can capture, weakening what the SWOT labeled an "opportunity." Recognizing that can flip the recommendation toward the lower-cost, lower-risk option or toward the option that leverages a defensible internal strength.
4. a. Payback: Option A = \$60,000 / \$25,000 = 2.4 years; Option B = \$20,000 / \$12,000 ≈ 1.67 years. (b) First-year ROI: Option A = \$25,000 / \$60,000 ≈ 41.7%; Option B = \$12,000 / \$20,000 = 60%. (c) Option B is better on both here — but note A generates more absolute profit (\$25,000 vs. \$12,000 per year). The split (higher absolute return vs. faster, higher-percentage return) shows why payback, ROI, and absolute profit can disagree, so the strategic decision must weigh risk, capital availability, and fit alongside any one metric.
5. A complete PACED answer: Problem (the choice), Alternatives (Option A, Option B, and arguably "do neither"), Criteria (return, risk/capital, strategic fit, competitive durability), Evaluate (score each option against each criterion, citing at least one SWOT factor — e.g., "Option B leverages our existing capacity, a Strength" — and one Five Forces factor — e.g., "Option A enters a segment with intense rivalry"), and Decide (commit to one option and defend it). The grader is looking for a decisive recommendation backed by evidence, exactly as the CED's decision-making skill requires.
6. Two leading KPIs tied to the chosen option: for a growth option, track new-customer acquisition rate and early repeat-purchase/retention rate — both move *before* full-year profit does, so they signal within months whether demand is materializing. Explain that lagging indicators (annual net income) confirm the outcome only after the year is over, whereas leading indicators let the business correct course while the decision is still playing out.

Cross-Case Synthesis Questions

These questions require you to draw on two or more cases simultaneously. They are harder than single-case questions and closer to the kind of thinking the AP free-response section rewards. Work through the individual cases before attempting these.

1. Bombas (Topic 1.1) vs. Crepes & Waffles (Topic 4.4): Mission as competitive strategy

Both companies have built social missions into their core business model — Bombas through "buy one, give one" and Crepes & Waffles through hiring single mothers. How does each company turn its social mission into a competitive advantage? Where does each mission constrain the business model in ways that limit strategy?

Answer sketch. Bombas converts its mission into a pricing premium — consumers pay more because they are buying impact alongside product. The constraint: the donation cost is a permanent COGS addition that limits gross margin below what a mission-free competitor achieves. Crepes & Waffles converts its mission into an earned media and culture advantage — the hiring story generates press attention and recruits employees who are motivated by the mission, reducing turnover costs. The constraint: the mission prevents labor automation and limits the geographic markets where "single mothers seeking employment" is a sufficient talent pool. The deeper pattern: Bombas's mission creates a cost constraint on the product economics; Crepes & Waffles's mission creates an operational constraint on the human resource strategy. Both missions are simultaneously a strength and a boundary.

2. Hershey (Topic 3.6) vs. siggi's (Topic 2.4): Competing on the income statement

Hershey is a mature public company with dominant market share; siggi's is a challenger brand in an established category (yogurt) that competes on differentiation. How does each company's strategic position show up differently on the income statement? What would each company's gross margin, operating expense structure, and net margin reveal about its competitive strategy?

Answer sketch. Hershey benefits from scale: its COGS as a percentage of revenue is lower than smaller competitors due to purchasing power and manufacturing efficiency. Its operating expenses include substantial advertising spend required to maintain brand salience in a mature market — a defensive investment rather than a growth investment. Gross margin is relatively stable; net margin is compressed by the scale of operating expenses. siggi's, as a premium-positioned challenger, has higher gross margins (the pricing premium is not fully offset by higher ingredient costs) but also higher operating expenses per dollar of revenue (smaller scale means SG&A and distribution costs are a larger percentage). Net margin may be lower than Hershey's despite the higher gross margin. The key insight: differentiation-based competitors have higher gross margins but do not always have higher net margins because the cost of building and defending the differentiated position is high.

3. New Coke (Topic 2.3) vs. Stanley (Topic 2.6): The limits and power of market research

New Coke is the canonical example of research that measured the wrong thing. Stanley's viral Quencher success is often cited as an example of a company that succeeded without conventional market research — relying instead on organic social media signals. What does each case teach about the limits of traditional market research? What does each teach about the conditions under which market research is most and least predictive?

Answer sketch. New Coke's failure shows that quantitative market research (blind taste tests) is reliable for measuring sensory preferences but unreliable for measuring brand attachment, identity, and emotional value. The research was executed flawlessly but asked the wrong question. Stanley's success shows that organic social media behavior can be better market research than formal surveys — TikTok views, reposts, and resale

prices revealed genuine consumer enthusiasm before the company fully recognized it. The lesson is not “market research is bad” but rather: research is only as good as the question it asks. New Coke asked “which tastes better?” when the decision required “how much of our market is emotional rather than sensory?” Stanley’s “research” was the market itself revealing preferences through revealed behavior (purchases, posts, resale) rather than stated preferences (surveys).

4. DK Coffee Lab Part 1 + Part 2 (Topics 3.4 + 3.5): From startup costs to expansion capital

Take DK Coffee Lab as a single continuous business story. Walk through the full financial journey: from initial expense classification (Part 1) to the capital decisions required for expansion (Part 2). What does this combined case demonstrate about how a small business’s financial challenges evolve from startup to scaling?

Answer sketch. At startup (Part 1 concepts), the challenge is classifying and controlling costs — understanding which costs are fixed vs. variable, setting a realistic break-even, and making sure the price structure covers the cost structure. The dominant concern is survival: generating enough contribution margin to cover fixed costs. At expansion (Part 2 concepts), the financial challenge shifts to capital structure: how to fund growth without destroying ownership or taking on unsustainable debt. The income-statement skills from Part 1 feed directly into the capital decision in Part 2: a founder who can demonstrate positive gross margin and operating cash flow has a much easier time qualifying for an SBA loan than one who cannot. The combined lesson: financial literacy is sequential — you cannot make good capital decisions without first understanding your expense structure.

5. Token of Trust (Topic 2.1) vs. BREAUX Capital (Topic 4.2): B2B vs. mission-driven KPI design

Token of Trust is a B2B technology company where success is measured in revenue-per-customer and contract renewal rates. BREAUX Capital is a mission-driven community-finance business where success is ultimately measured in member financial outcomes. How does each business’s model shape the KPIs it should track? What does each case reveal about the limits of purely financial KPIs?

Answer sketch. Token of Trust’s KPIs are naturally financial and behavioral: CAC, CLV, CLV/CAC ratio, contract renewal rate, net revenue retention. These are well-defined, objectively measurable, and directly tied to business health. The risk: optimizing purely for renewal rate might cause the company to retain unhappy clients who don’t complain, missing churn risk signals. BREAUX Capital faces the opposite problem: the ultimate KPI (member financial wellness) is difficult to measure and occurs over years. Activity KPIs (logins, course completions) are measurable but can be gamed or decoupled from actual financial improvement. The synthesis: all mission-driven businesses face a gap between what is measurable (activity) and what matters (impact). The best KPI systems for mission-driven businesses pair leading activity metrics with periodic outcome measurements — accepting that outcome measurement is slower and more expensive, but necessary to validate that the activity is actually achieving the mission.

6. Assort Health (Topic 4.1) vs. ExpressionMed (Topic 4.3): Management and strategy in regulated markets

Both companies operate in healthcare-adjacent markets subject to regulatory oversight. Assort Health focuses on management functions in a regulated environment; ExpressionMed focuses on strategic decisions in a niche medical device accessory market. How does operating in a regulated market change both the management function priorities and the strategic decision criteria for these businesses?

Answer sketch. For Assort Health, regulation elevates the “controlling” management function above all others — in healthcare tech, a failure of the controlling function (missing a compliance requirement, allowing a data breach) is not just a business setback but a potential shutdown-level event. Management decisions are made with a compliance filter that non-regulated businesses don’t require. For ExpressionMed, regulation shapes the strategic decision criteria: expanding into new device categories (insulin pumps, hearing aids) requires

understanding FDA regulatory pathways, which adds time and cost to any market entry that a simple consumer goods company wouldn't face. The common pattern: regulated markets compress the range of available strategic options and require tighter controlling mechanisms than unregulated markets. The strategic advantage: regulatory barriers are also entry barriers — they protect existing players from casual competitors.

7. Corley Plumbing (Topic 1.3) vs. Incredible Health (Topic 1.2): Small business vs. platform business in the same labor market

Both cases involve skilled labor markets: plumbers (Corley) and nurses (Incredible Health). How do the competitive forces facing each business differ because of their fundamentally different business models (local service provider vs. technology platform)? What does the comparison reveal about how business model choice affects competitive advantage?

Answer sketch. Corley Plumbing competes in a local, geographically bounded market where competitive advantage comes from service quality, local reputation, and licensing. Its competitive position is strong within its geography but cannot scale without geographic expansion (adding trucks, hiring plumbers in new areas). Incredible Health competes in a national market where competitive advantage comes from network effects that are self-reinforcing regardless of geography — more hospitals attract more nurses, which attracts more hospitals, at near-zero marginal cost per additional participant. The fundamental difference: Corley's advantage scales linearly (more labor = more capacity); Incredible Health's advantage scales non-linearly (more participants = exponentially more valuable network). This reveals how business model determines the nature of the competitive moat: service businesses have local moats; platform businesses have network-effect moats.

8. Yardley (Topic 3.9) vs. Hershey (Topic 3.6): Financial reporting integrity and the income statement

The income statement only has value to external stakeholders (investors, lenders, regulators) if it accurately reflects reality. Yardley (financial reporting ethics) and Hershey (income statement reading) represent two sides of the same document: what it should contain and what happens when it is manipulated. How does understanding financial reporting ethics (Topic 3.9) change how you read and interpret a real income statement like Hershey's?

Answer sketch. Reading Hershey's 10-K after studying financial reporting ethics introduces a productive skepticism: revenue recognition timing, COGS classification choices, and operating expense categorization are all judgment calls that management makes — and that auditors verify. A student who understands Topic 3.9 asks: Is any revenue being recognized early? Are any expenses being deferred or capitalized that should be expensed currently? The ethical obligations of Topic 3.9 are the backstop that makes Topic 3.6's income statement useful. Without accurate reporting (enforced by SOX, audit requirements, and personal CEO/CFO certification), every income statement margin calculation is potentially misleading. The combined lesson: financial literacy is not just calculating margins — it is understanding who certified the numbers and why you should (or shouldn't) trust them.

Note on Unit 3 (Part 1) and Unit 5

The CED does not name specific real-company business cases for Unit 3 (Part 1) topics 3.1 (Saving for Future Purchases) and 3.2 (Borrowing, Credit, and Debt), nor for Unit 5 topics 5.1 (Taxes, Net Income, Budgeting), 5.2 (Managing Personal Risk), and 5.3 (Saving and Investing for Goals). These topics are taught primarily through the **personal-finance standards integration** (the National Standards for Personal Financial Education referenced in the CED appendix), the **Financial Advisor Project** scenarios, and chapter-end FRQ practice — not through real-company cases.

For practice with personal-finance scenarios, see:

- The Financial Advisor Project Guide (Appendix G in print)
- The Financial Advisor Profiles file in this companion (building toward 8 household profiles; 4 fully worked so far)
- The Extra FRQ Practice file in this companion (Personal Finance FRQs)

How to use this file

If you have AP Classroom access: Use the AP-provided case as the primary source. Use this file as a structured study companion — pre-read the topic and framework concepts here, work through the AP-provided case, then attempt the discussion questions below.

If you don't have AP Classroom access: Each case is a real (or near-real) company you can research from publicly available sources — company websites, public filings (for Hershey), business journalism, founder interviews. Combine the public information about the company with the framework concepts above and the discussion questions to engage with the case substantively.

For teachers: This file is designed to complement (not replace) the AP-provided case materials. Use it as a structured discussion outline or as homework prep before in-class case discussion.

Closing notes

- **Verify case titles with the current CED.** The cases named here are taken from the Fall 2026 CED. The College Board may revise cases in future editions; always check the most recent CED on AP Central.
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