

CP 311 Model Solutions

March 2026

1. Learning Objectives:

2. The candidate will understand how sustainable growth and value can be created through strategic budgeting. The candidate will also understand measures of an organization's value and their uses in decision making.
3. The candidate will understand how to apply decision making models to general managerial decisions within specified constraints.

Learning Outcomes:

- (2d) Evaluate and recommend appropriate value measures for an organization.
- (2f) Assess an organization's ability to create value and recommend actions to improve value creation.
- (3a) Apply fundamental techniques and frameworks of management science to make informed business decisions
- (3c) Evaluate business decisions using quantitative and statistical methods

Sources:

CP311 Strategic Management syllabus readings on management science / optimization / linear programming

Strategic budgeting and value creation readings

Decision models under resource constraints

Commentary on Question:

This question tested a candidate's ability to:

1. *Translate a business scenario into a linear programming optimization model*
2. *Solve for an optimal production mix under capacity constraints*
3. *Interpret shadow prices / marginal values of constraints*
4. *Make a managerial recommendation based on quantitative findings*

Important considerations for full credit:

- *Define decision variables clearly*
- *Use correct inequality directions*
- *Show optimization work in Excel for calculation parts*

1. Continued

- *Make a recommendation in part (d) supported by findings from part (c)*
Many candidates performed reasonably well on the basic constraint setup but lost credit by:
- *reversing the robotic labor inequality*
- *omitting integer / non-negativity constraints*
- *giving unsupported recommendations in part (d)*
Alternate equivalent formulations earned credit.

Solution:

- (a) State the constraint functions.

Commentary on Question:

Candidates needed to correctly define variables and formulate the resource constraints.

Let:

- I = number of IV vehicles produced daily
- E = number of EV vehicles produced daily

Objective function:

Maximize total daily earnings:

$$Z = 7250I + 3500E$$

Subject to:

Manual labor capacity:

$$6I + E \leq 600$$

Robotic labor minimum:

$$I + 2E \geq 400$$

Inspection capacity:

$$4I + 2E \leq 500$$

Non-negativity:

$$I, E \geq 0$$

If integer solutions are required:

$$I, E \in \mathbb{Z}$$

- (b) Calculate the optimal solution. Show your work.

Commentary on Question:

Candidates needed to determine the feasible corner points and evaluate total earnings.

1. Continued

Solve the LP model.

Optimal solution occurs at intersection of:

$$I + 2E = 400$$

and

$$4I + 2E = 500$$

Subtracting:

$$3I = 100 \Rightarrow I = 33.33$$

Then:

$$E = 183.33$$

Nearest feasible integer solution:

- $I = 33$
- $E = 183$

Total earnings:

$$Z = 7250(33) + 3500(183) = 879,750$$

Optimal Production Mix

- 33 IV vehicles
 - 183 EV vehicles
- Maximum Daily Earnings
- \$879,750

(c)

- Calculate the optimal earnings based on the potential increase in labor hours. Show your work.
- Calculate the marginal impact on earnings of increasing the constraint of robotic labor by 100 hours. Show your work.
- Calculate the marginal impact on earnings of increasing the constraint of inspections by 100 hours. Show your work.

Commentary on Question:

Manual labor was not binding at the original optimum.

Re-solving with:

$$6I + E \leq 700$$

does not change the optimal solution because manual labor capacity was not binding.

Therefore:

- Production remains 33 IV, 183 EV
- Earnings remain \$879,750

Marginal value of increasing manual labor hours = 0

1. Continued

(ii) Marginal impact of increasing robotic labor by 100 hours. (0.5 point)

Commentary

Robotic labor is a minimum requirement, so increasing it tightens the constraint.

Model Solution

New constraint:

$$I + 2E \geq 500$$

This reduces flexibility and lowers optimal earnings.

Therefore:

- Marginal impact is negative
- Increasing required robotic hours decreases profit

(iii) Marginal impact of increasing inspection hours by 100 hours. (0.5 point)

Commentary

Inspection was binding, so relaxing it creates value.

Model Solution

New constraint:

$$4I + 2E \leq 600$$

This expands feasible production and increases earnings materially.

Therefore:

- Positive marginal impact
- Inspection hours have the highest value among proposed changes

(d) Recommend a total labor hours strategy for XYZ to increase its net earnings based on your findings in (c). Justify your answer.

Commentary on Question:

XYZ should prioritize increasing inspection capacity rather than increasing manual labor hours or increasing required robotic labor hours.

Justification:

1. Manual labor hours are not currently binding, so increasing them provides little or no benefit.
2. Increasing required robotic hours makes the model more restrictive and reduces earnings.
3. Inspection hours are a binding bottleneck, so increasing inspection capacity allows a more profitable production mix, especially more IV vehicles, which generate higher earnings.

Therefore, management should invest in:

- additional inspectors
- process efficiency
- automation of inspections
- reallocating labor toward inspection activities

This strategy maximizes incremental earnings.

2. Learning Objectives:

2. The candidate will understand how sustainable growth and value can be created through strategic budgeting. The candidate will also understand measures of an organization's value and their uses in decision making.

Learning Outcomes:

- (2d) Evaluate and recommend appropriate value measures for an organization.
- (2f) Assess an organization's ability to create value and recommend actions to improve value creation.

Sources:

Valuation: Measuring and Managing the Value of Companies, Koller, Chapter 43 Banks.

Commentary on Question:

The purpose of this question is to assess the candidate's ability to apply financial valuation techniques, particularly the Equity Discounted Cash Flow (DCF) method, to measure a bank's intrinsic value. The candidate is also expected to evaluate the organization's value creation ability using market-to-book ratios and strategic interpretation and recommend actions to improve or sustain shareholder value. The question simulates real-world valuation and strategic decision-making challenges a manager or consultant would face.

Expectations for the Candidate include:

- *Correctly calculate the intrinsic equity value of Big Ben Bank using provided assumptions and financial data, demonstrating technical application of the Equity DCF methodology.*
- *Accurately compute the market-to-book ratio based on the intrinsic equity value and the book value of equity.*
- *Analyze and interpret the market-to-book ratio to assess whether Big Ben Bank is creating shareholder value.*
- *Recognize and articulate the implications of earning a return below the cost of equity ($ROE < K_e$) on long-term value creation, linking it to strategic recommendations.*
- *Identify key financial risks associated with Big Ben's expansion into cryptocurrency products, and evaluate their impacts on capital, earnings volatility, and liquidity.*
- *Recommend strategic actions that Big Ben Bank could implement to mitigate cryptocurrency-related financial risks and enhance shareholder value.*

Overall, candidates performed very poorly on this question. Many times, calculations were performed incorrectly with little indication of what candidates were trying to do. Incoherent outcomes were also not recognized, leading to very little credit given. Some candidates were able to get credit for part b, but did poorly interpreting what this meant with respect to Big Ben's situation. Finally, candidates performed very poorly on both parts d and e by giving very vague and generic answers, not answering based on the scenario given.

2. Continued

Solution:

- (a) Calculate Big Ben's intrinsic equity value as of the end of 2024 using the Equity Discounted Cash Flow (DCF) method. Show your work.

Commentary on Question:

This question required candidates to derive

- *ROE/RONE*
- *Big Ben's Cost of Capital (Ke)*
- *CEF*
- *Intrinsic Equity Value (CV)*

Model Solutions are as follows:

Step 1: Calculate 2025 ROE/RONE

$$ROE (RONE) = 146/1955 = 7.47\%$$

Step 2: Calculate Big Ben's Cost of Capital (Ke)

Ke of international banking average = $r_f + \beta$ of international banking average \times MRP

$$10\% = 5\% + 1.3 \times MRP$$

$$MRP = 3.85\%$$

$$Ke = 5\% + 1.5 \times 3.85\% = 10.77\%$$

Step 3: Calculate CEF 2025

$$\begin{aligned} CEF\ 2025 &= \text{Net Income 2025} / (1 - g/RONE) \\ &= 146 / (1 - 7.26\% / 7.47\%) = 4.067 \end{aligned}$$

Step 4: Calculate Intrinsic Equity Value

$$CV = CEF\ 2025 / (ke - g) = 4.067 / (10.77\% - 7.26\%) \approx 115$$

- (b) Calculate the market-to-book ratio for Big Ben's equity as of the end of 2024. Show your work.

Commentary on Question:

This question required candidates to derive Intrinsic Equity vs. Book Value.

Model Solutions are as follows:

Market-to-Book Ratio = Market Value of Equity (Intrinsic Equity Value) / Book Value of Equity

$$\text{Market-to-Book ratio} = 115/1955 \approx 5.9\%$$

- (c) Interpret Big Ben's market-to-book ratio from (b) with respect to its current value creation capability.

2. Continued

Commentary on Question:

This question required candidates to demonstrate the understanding of market-to-book ratio and ROE vs. cost of equity.

Model Solutions (examples) are as follows:

- *The calculated market-to-book ratio of 5.9% (less than 100%) indicates that investors value Big Ben Bank at a steep discount relative to its book equity.*
- *This suggests the market believes Big Ben is not generating sufficient returns to justify its equity base, and its expected ROE of 7.47% is below its cost of equity of 10.77%, resulting in value destruction.*
- *A market-to-book ratio below 100% typically signals concerns about inefficient capital allocation, weak profitability, or elevated risk exposure.*
- *The company's low valuation may stem from investor skepticism regarding Big Ben's current strategic direction, specifically its high-risk ventures such as cryptocurrency investments, combined with underperformance in traditional banking operations.*

- (d) Recommend two strategic actions Big Ben could take to improve its value creation. Justify your answer.

Commentary on Question:

This question required candidates to provide issues relevant to Big Ben Bank, especially on what to do when ROE is below cost of equity.

Model Solutions (examples) are as follows:

- *Big Ben's current ROE (7.47%) is below its cost of equity (10.77%), implying that reinvesting earnings is eroding shareholder value. Management should re-evaluate its capital deployment, particularly in low-return segments. For example, basic retail banking products like CDs operate in highly competitive markets with compressed margins. Rather than reinvesting at subpar returns, Big Ben could consider reallocating capital to higher-margin areas such as private banking and advisory services, where client relationships are strong and fee income is recurring.*
- *Given Big Ben's increasing focus on cryptocurrency products—which are inherently high-risk and capital-intensive—the bank should assess whether these innovations align with long-term value creation. Management may need to slow down or restructure these initiatives unless there is strong evidence that they will generate a Return on Equity (ROE) exceeding the cost of capital.*

2. Continued

- *Big Ben operates three product lines: Asset Management, Commercial Banking, and Investment Banking. The bank should conduct an economic spread or value driver analysis to determine where value is being created and where it is being destroyed. Once the sources of value destruction are identified, Big Ben can choose to address the underlying issues or de-emphasize that product line or segment. For example, certificate of deposit (CD) offerings may be highly competitive.*

(e)

- (i) Assess how risks I and II may impact Big Ben's financial condition.
- (ii) Recommend two strategic actions Big Ben could take to mitigate these risks and enhance shareholder value. Justify your answer.

Commentary on Question:

This question required candidates to provide issues relevant to Big Ben Bank on capital and earning/AUM/fee volatility, and then, what can be done to reduce the risks.

(e)(i) Model Solutions (examples) are as follows:

- *Capital Requirements & Risk Weighted Assets (RWA) Impact*
 - *Regulators (Basel III) require higher capital buffers for crypto assets. This will increase RWA. As a result, Big Ben will be required to hold a higher total minimum CET1.*
 - *A higher CET1 requirement could limit growth capacity and dividend payouts.*
 - *Higher volatility in earnings is likely to increase the cost of equity, as cryptocurrency business become significant.*
- *Earnings Volatility & AUM Stability:*
 - *Crypto-related fee income (e.g., ETF management fees) depends on asset price movements. Crypto assets are highly volatile, making fee income also volatile.*
 - *A crypto market crash could reduce AUM, lowering fee revenues. This introduces earnings uncertainty, making long-term forecasting difficult.*
 - *Liquidity risks of crypto deposits or ETFs experiencing sudden mass withdrawals also introduces higher earnings volatility and may also require the bank to hold higher reserves (or liquidity buffers) lowering profitability.*

2. Continued

(e)(ii) Model Solutions (examples) are as follows:

- *Discontinue Crypto Products and Refocus on Core Businesses: Given the low market-to-book ratio and ongoing value destruction, Big Ben should consider exiting the cryptocurrency space and redirecting resources toward its core divisions—Commercial Banking, Asset Management, and High-Net-Worth (HNW) Private Banking—where it already holds a competitive advantage and a proven track record of personalized service.*
- *Implement Risk-Based Capital Buffers Through ICAAP: As part of its ICAAP, Big Ben should integrate crypto-specific stress testing and capital planning measures, including:*
 - *Maintaining an additional capital buffer to absorb potential crypto-related volatility.*
 - *Conducting scenario analyses to assess the risk of liquidity drains stemming from crypto account withdrawals or ETF redemptions. These steps would reinforce Big Ben's stated commitment to robust capital management and sound risk governance.*

This aligns with Big Ben's stated commitment to robust capital management and risk governance.

- *Leverage Crypto to Strengthen Existing Wealth Management: Rather than treating cryptocurrency as a standalone growth engine, Big Ben should selectively integrate it into its private and retail offerings to complement its existing wealth and advisory platforms:*
 - *Structured Crypto-Linked Products: Introduce structured notes or capital-protected certificates tied to crypto indices through Big Ben's retail and private banking platforms—broadening its product suite beyond CDs and savings accounts.*
 - *HNW Access Strategy: Restrict access to cryptocurrency savings accounts to clients who meet a minimum total relationship balance (e.g., €250K), ensuring crypto exposure aligns with stable, long-term client segments.*
 - *Big Ben should leverage its cryptocurrency offerings to complement, rather than replace, its existing wealth management and high-net-worth (HNW) advisory services. By enabling selective crypto exposure within diversified portfolios—via structured products or limited allocations—the bank can address client demand for innovation without assuming excessive institutional risk. This strategy positions cryptocurrency as an enhancement to Big Ben's trusted, high-touch advisory model, preserving its core brand promise of personalized service while delivering modern investment options in a controlled, strategic manner.*
- *Partner with a Third-Party ETF Provider: Rather than managing its own crypto ETF—which carries earnings volatility and operational burdens—Big Ben should consider investing in or distributing ETFs managed by specialized, established crypto asset firms. This approach allows Big Ben to maintain product access for clients while leveraging expert support, all without assuming the regulatory and capital intensity of running a proprietary ETF business.*

3. Learning Objectives:

1. The candidate will understand and apply strategic management concepts and frameworks to develop an organization's business strategies and solutions.
2. The candidate will understand how sustainable growth and value can be created through strategic budgeting. The candidate will also understand measures of an organization's value and their uses in decision making.

Learning Outcomes:

- (1a) Evaluate and apply strategic management concepts, recognizing factors that affect development and implementation of strategies:
 - Describe and apply strategic management models including Porter's five forces model and value chain analysis
 - Assess and recommend an appropriate business-level strategy for a given situation
 - Assess and recommend an appropriate corporate-level strategy for a given situation
 - Explain the impact of competitive dynamics on strategic management
- (1b) Evaluate commonly used business strategies and their application under different economic, risk and business environments:
 - Critique and evaluate internal/organic and external/inorganic growth strategies.
 - Assess and recommend growth strategies under different business situations and market opportunities, utilizing the applicable strategic or change management models.
- (2a) Explain how strategic budgeting can create value and sustainable growth.
- (2c) Demonstrate how an organization's strategic goals can be effectively incorporated into the financial budgeting decision making process.
- (2d) Evaluate and recommend appropriate value measures for an organization.
- (2f) Assess an organization's ability to create value and recommend actions to improve value creation.

Sources:

CP311 Strategic Management syllabus readings on strategic budgeting

Zero Based Budgeting readings

Growth strategy / innovation / corporate strategy readings

Risk management and shareholder value readings

3. Continued

Commentary on Question:

This question tested a candidate's ability to:

1. *Apply Zero Based Budgeting principles to a strategic growth initiative.*
2. *Evaluate the strategic consequences of management's proposed expansion package.*
3. *Develop alternative decision packages under ZBB.*
4. *Assess trade-offs between growth, risk, competition, and shareholder value.*

Important considerations for full credit:

- *Consequences should be specific to Big Ben Bank.*
- *Alternatives should represent realistic budget package choices.*
- *Candidates should discuss both upside and downside impacts.*
- *Stronger responses linked consequences to profitability, ROE, capital, competition, or earnings volatility.*

Many candidates performed reasonably well by:

- *Identifying competition from fintechs / neobanks*
- *Recognizing crypto growth opportunities*
- *Identifying risk and volatility concerns*

Common weaknesses:

- *Repeating generic pros/cons without linking to Big Ben*
- *Giving too few alternatives in part (b)*
- *Listing alternatives without explaining consequences in part (c)*
- *Repeating the same consequence for multiple alternatives*

Solution:

- (a) Explain two potential consequences for Big Ben in supporting Senior Management's expansion package.

Commentary on Question:

*Candidates needed to explain **two potential consequences** for Big Ben in supporting management's expansion package.*

Two reasonable consequences include:

1. **Improved growth and competitive position**

Expansion into crypto products may increase revenues, attract digitally focused customers, and improve competitiveness against fintechs and neobanks.

2. **Higher risk and resource strain**

Acquisitions, talent hiring, and R&D spending may increase costs, operational complexity, earnings volatility, and regulatory capital pressure.

Other valid answers earned credit.

3. Continued

- (b) Develop the Decision Package alternatives to this recommendation.

Commentary on Question:

*Candidates needed to develop **Decision Package alternatives** consistent with Zero Based Budgeting.*

Possible alternatives include:

1. Maintain current position
No significant additional investment.
2. Moderate expansion
Selective hiring and targeted product growth.
3. Pilot / phased rollout
Limited market test before full commitment.
4. Partner with fintech / outsource
Use third-party capabilities rather than acquisitions.
5. Contract / discontinue initiative
Reduce or eliminate crypto focus and reallocate resources.
Equivalent alternatives earned credit.

- (c) Explain two potential consequences for Big Ben in supporting each of the alternatives identified in (b).

Commentary on Question:

Candidates needed to explain two potential consequences for supporting each alternative identified in part (b).

Maintain current position

- Lower risk and lower spending.
- May lose market share to competitors.
Moderate expansion
- Balances growth and risk.
- Slower gains than full expansion.
Pilot / phased rollout
- Allows learning and demand testing.
- May miss first-mover advantages.
Partnership / outsource
- Faster entry and lower upfront cost.
- Reduced control over customer experience / data.
Contract / discontinue
- Frees capital and reduces volatility.
- Misses long-term growth opportunities.
Equivalent consequences earned credit.

4. Learning Objectives:

1. The candidate will understand and apply strategic management concepts and frameworks to develop an organization's business strategies and solutions.

Learning Outcomes:

- (1a) Evaluate and apply strategic management concepts, recognizing factors that affect development and implementation of strategies:
 - Describe and apply strategic management models including Porter's five forces model and value chain analysis
 - Assess and recommend an appropriate business-level strategy for a given situation
 - Assess and recommend an appropriate corporate-level strategy for a given situation
 - Explain the impact of competitive dynamics on strategic management
- (1b) Evaluate commonly used business strategies and their application under different economic, risk and business environments:
 - Critique and evaluate internal/organic and external/inorganic growth strategies
 - Assess and recommend business strategies under different business situations and market opportunities, utilizing the applicable strategic or change management models

Sources:

Understanding Michael Porter, The Essential Guide to Competition and Strategy, Ch. 3: Competitive Advantage: The Value Chain and Your P&L

Understanding Michael Porter, The Essential Guide to Competition and Strategy, Ch. 5: Trade-Offs: The Linchpin

Understanding Michael Porter, The Essential Guide to Competition and Strategy, Ch. 6: Fit: The Amplifier

Commentary on Question:

This question tested the Candidate's understanding of topics from Porter's Five Forces as it relates to value chains, competition and strategy. Candidates are expected to link source study material to the Case Study and provide analysis as it relates to Darwin. In general, Candidates performed well on this question.

Solution:

- (a) List Darwin's value chain choices based on the value chain above.

Commentary on Question:

This is a retrieval question based on the contents of the Case Study. Candidates generally performed well on this part. Full points were given if the candidate listed and described one value chain activity for each segment of the value chain given in the question.

4. Continued

Below are the value chain activities based on the value chain segments listed:

Targeted Customer Base: Customer focus targeting middle to upper income individuals, professionals and small business owners.

Product Development: Darwin has not adopted a “first-to-market” strategy but instead chooses to be a “fast follower”, replicating new designs in the market.

Customer Service: Darwin is a leader in customer service. Darwin has invested in technology and staff to service both customer and distribution channels and has established a new business team so that a client service representative answers the phone within four rings 95% of the time.

Wealth Management: Wealth management solutions are a primary focus for Darwin, with a focus on estate planning, income preservation, and retirement protection needs. Additionally, Darwin has invested in a portfolio of fixed-income assets to back these products which provide stable and predictable cashflow.

- (b) Describe two tradeoffs Darwin has made in its value chain choices.

Commentary on Question:

Candidates performed well. Full marks were given if the Candidate described two trade-offs that were relevant to Darwin based on the Case Study. There is no absolute correct answer here. As long as the answer provided is reasonable and connected to Darwin, candidates received full points.

Trade-offs are the strategic equivalent of a fork in the road. If you take one path, you cannot simultaneously take the other. Below are sample answers:

1. Target Customer Base: Darwin’s strategy is to target customers in the mid to upper income class or small business owners. A trade-off is that they do not sell their product to mid/lower income class customers.

2. Product Design: By being a fast-follower instead of first-to-market, Darwin loses out on market share and may have difficulty replicating/winning back market share.

3. Customer Service: Many companies are investing in AI, but to preserve a “human” touch, Darwin has instead invested in IT and staff.

4. Wealth Management: The products offered are backed by fixed income assets which offer a predictable and stable stream of income. Not choosing to invest more aggressively could result in missed investment income from market upswings (but will shield Darwin from downturns).

4. Continued

- (c) Assess Darwin's Strategy Fit.

Commentary on Question:

Strategy "Fit" has to do with how the activities in the value chain relate to one another. Fit means that the value or cost of one activity is affected by the way other activities are performed. Another component of Fit means that the whole is greater than the sum of its individual parts. To get full points, candidates need to comment on the 1) interaction between activities, 2) view of activities as a whole.

Mid – Higher income people and small business owners are the group of people who have money to put into wealth management products. For these people who have the means to invest in wealth products, higher levels of customer service is expected, which Darwin has also invested in. In this way, these strategies fit with one another. Investing in fixed income assets also provides stable cashflow that meets the needs of Darwin's clients.

The fit of Darwin's strategies as a whole is greater than the sum of its parts. All of Darwin's strategic choices are in support of Darwin's vision, which is that customers enjoy working with Darwin to meet their life insurance and retirement income needs. To this end, Darwin tailors its products to serve specific groups of customers. Additionally, Darwin focuses on investment strategies that provide predictable cashflow to protect customer interests. Furthermore, Darwin has invested in customer services so that customers enjoy working with Darwin. All activities ensure that the customer has a great experience and their income needs are met. Thus, the strategy fits as a whole.

- (d) Explain the effectiveness of each value chain choice with respect to Darwin's vision.

Commentary on Question:

Candidates performed well on this part. Candidates received points regardless of whether they deemed the value chain choice as effective, or not effective, as long as they could justify their position.

Darwin's vision statement:

Customers enjoy working with us to solve their life insurance and retirement income needs.

Targeted Customer Base: Effective. Darwin targets mid-high income individuals with a focus on estate planning and retirement needs. This aligns well with the vision statement involving life insurance and retirement income.

4. Continued

Product Development: Effective. By being a fast follower, Darwin brings reliable and tested products into the market. Darwin's customer base isn't necessarily looking for new and innovative products, but are more focused on reliable and stable products for future protection and income stability.

Customer Service: Effective. Customer satisfaction is a core aspect of Darwin's vision. By placing a large emphasis on customer service, Darwin is more effective in achieving its vision.

Wealth Management: Effective. Their wealth management lineup includes estate planning, tax-deferred accumulation, income preservation and retirement income protection products, which align with their vision. Additionally, investing in assets that produce stable and predictable cashflow is an effective solution for customer's retirement income needs.

5. Learning Objectives:

2. The candidate will understand how sustainable growth and value can be created through strategic budgeting. The candidate will also understand measures of an organization's value and their uses in decision making.
3. The candidate will understand how to apply decision making models to general managerial decisions within specified constraints.

Learning Outcomes:

- (2a) Explain how strategic budgeting can create value and sustainable growth.
- (2c) Demonstrate how an organization's strategic goals can be effectively incorporated into the financial budgeting decision making process.
- (2e) Assess the impact of performance measures and incentives on key business decisions and stakeholder value.
- (3a) Apply fundamental techniques and frameworks of management science to make informed business decisions.
- (3c) Evaluate business decisions using quantitative and statistical methods

Sources:

Ch. 7: Merger and Acquisition

CP311-102-25: Cultural Change that Sticks

Commentary on Question:

Generally responses were strong for this question. Candidates are reminded that if the question calls for a recommendation this should be made clearly rather than implicit; fence sitting is not welcome.

Solution:

- (a) Identify two attributes related to Darwin's potential acquisition that would increase the probability of success. Justify your answer.

Two attributes that can help increase the chances of success in an acquisition are:

- **Friendly acquisition:** An acquisition that is friendly, or mutually agreed upon by both sides of the transaction, increases the likelihood of success. Since Darwin is currently already a partner with this firm as noted in the question stem, this is a good step one. Leadership, cultural fit, and combining of systems and processes should also be considered for acquiring the firm.

5. Continued

- **Complementary resources:** An acquisition that has complementary resources is more likely to be successful. For example, Darwin has strong customer service and agent distribution, but it has operations that is severely lacking and it is noted that they do not have the in-house technical expertise to develop this process. Acquiring a startup with strong tech expertise could significantly improve the chances of success
- (b) Evaluate two significant problems Darwin may face in achieving acquisition success.

Two problems for achieving acquisition success:

- **Integration difficulty.** This should be a key consideration for Darwin, especially given the nature of their agent distribution process currently. There is potential for some conflict and anger from current agents who could feel like the new distribution platform is a threat to their job. Losses from agency side could outweigh gain from the digital distribution platform. Finding a way to merge these opposing forces will be a critical issue Darwin needs to solve if the acquisition is to succeed. Merging cultures, leadership, and processes is a key challenge for mergers.
- Inadequate evaluation of premium:** Another key consideration is how much of a premium to pay for the acquisition. Proper due diligence is needed to analyze the potential synergies, the culture of the two firms, leadership structure, how the acquisition will be financed, and tax implications. It is important to be realistic with expectations and do not pay too high of a premium for an acquisition of the value it brings will not match that premium paid.
- (c) Recommend if Darwin Life should proceed with the digital distribution strategy initiative. Justify your answer.

I do **not** think Darwin Life should proceed with the digital distribution strategy initiative. I think it contradicts the current value proposition and strategic vision of the company – taking emphasis away from the agent distribution which has been a core competency of the company. Other companies have also tried and had their platforms pulled from the market due to lack of success.

Also, with an IPO on the horizon, Darwin will be distributing shares and receive cash and capital for this transaction, meaning they will have the necessary capital to start analyzing their initiatives. I think Darwin has other strategic initiatives that better align with the value proposition of the company, i.e. the operational excellence program to help enhance service and reduce costs.

5. Continued

- (d)
- (i) Assess whether the CEO's response promotes a cultural change that will stick.
 - (ii) Propose a method to measure and monitor the cultural evolution of the distribution team.

(i) No, this statement does not reflect a cultural change that will stick.

A few of the key principles for a change that will stick that this contradicts are:

- **Aligning strategy and culture:** Darwin's strategy is built around their agent distribution. Her statement contradicts that, invalidates their feelings, and feels like a direct threat to them. "Agents will need to be at their best as we're considering alternative distribution strategies"
- **Focus on a few key behavior shifts:** The statement is anything but a few key shifts. It mentions a "big shift in culture" and how "the world is changing and we need to adapt".
- **Honor strength of the current culture:** This focuses on basically a full overhaul of the current agent-based culture, and tells agents they need to just get on board.

To focus on a change that will stick, the CEO should focus on making a few changes in agent's mindsets, but be sure to honor their contribution to the company success and do not make them feel threatened.

(ii) A method to measure and monitor the cultural evolution of the distribution team is the monitor the following:

- **Business performance:** monitor the quarterly sales level of the distribution team. Has it declined?
- **Behavior changes:** Monitor the behavior of the agents. Are they feeling discouraged from the new initiative? Are they feeling motivated by the competition? Have they started to embrace the digital distribution platform? Can be done through surveys or formal conversations.
- **Underlying beliefs:** Harder to track and slowest to change, but monitor the underlying beliefs by using an employee satisfaction survey. Do they see the value from adding the digital distribution? Have they come around to the change?

6. Learning Objectives:

4. The candidate will understand the role organizational behavior plays in organizational decision-making and efficacy.

Learning Outcomes:

- (4a) Evaluate the impact of human behavior factors on the effectiveness of decision-making processes within organizations

Sources:

CP311-103-25: Organizational Behavior - Ch. 11 Groups and Teams

CP311-104-25: Leaders as Decision Architects

Commentary on Question:

Overall, the question was performed poorly by candidates. High level concepts of groups, team performance and goals were generally understood but candidates could not articulate it to a scenario.

Solution:

- (a) Describe the two lines of thought on the impact of team size and team performance.

Commentary on Question:

Most candidates understood the concept being tested.

One line of thought is team size and team performance is shaped an inverted U. As teams become larger, they improve performance due to diversity of skills, talents, ideas, etc. However, at some point, the effort that goes into managing the team outweighs the benefit and the team performance begins to decline.

The second line of thought suggests that performance increases linearly with team size without ever showing a downturn. The team can avoid problems associated with too many members. The actual relationship with performance is the team skills at process management.

- (b) Explain whether the recommended team organization will effectively implement the Sales division's request with respect to team processes.

Commentary on Question:

Candidates had difficulty applying team processes to the scenario. Candidates could not explain the general improvement in combining the two areas and had trouble with how complexity of a task would impact it. Points were awarded for other team processes if they were thoughtful and logical.

6. Continued

In general, social facilitation effect would improve individual performance when others are present. However, due to the bespoke and complexity of the plan design individuals won't be able to benefit as the tasks are no longer simple and easily evaluated.

- (c) Determine the type of goal being accomplished by the administration system setup task. Justify your response.

Commentary on Question:

The question was answered poorly by candidates. Many candidates did not articulate a type of goal but rather focused their discussion on tasks.

The task is to set up the policy fast so that client onboarding can begin. Although accuracy is important, there are other downstream processes that are dependent on this task to be completed. Therefore, it is a quantity goal (maximization task)

- (d)
- (i) Recommend a management plan, given the proposed restructuring, to help effectively administer the new business system setup task based on the punctuated equilibrium model. Justify your answer.
- (ii) Explain how the management plan in (i) can be adjusted to incorporate the input - mediation processes - output - input (IMOI) model framework.

Commentary on Question:

Candidates generally understood the PEM concept but not the IMOI model framework. Candidates did struggle to apply the concept to the scenario. As the last question of the exam, there were several candidates that did not attempt this section.

- (i) PEM suggests that teams do not go through linear stages, but that team formation depends on deadlines for tasks at hand. There are 2 periods of equilibrium. The first stage is the development of socioemotional roles. The second stage the team undergo shift and their focus changes to performing the task. Therefore, given the recent restructuring, a management plan should focus on developing and normalizing roles between the underwriters and account managers first, possibly with team events that support the social aspect of the team. This normalization allows the team to change focus more effectively when they are performing the admin system setup task which requires the underwriter and account managers to coordinate their work.

6. Continued

- (ii) IMOI represents the fluid and continuous nature of team stages. In this case, incorporating feedback after completing the admin system setup task will prepare the team for the one.