ACCA

Advanced Performance Management (APM)

EDUCATION BOOK
(SAMPLE)

Contents:

Introduction to APM Exam

Format of the Exam:

- **Duration:** 3 hours 15 minutes computer-based examination (CBE) with only Word Processor (narrative answers) and Spreadsheet (Calculations) being the response options.

- **Pass Mark:** 50% for all ACCA Qualification examinations.

Marks Distribution:

Overall Exam:

- Total Marks: 100

- Technical Marks: 80

- Professional Skills Marks: 20

Section A:

- One Compulsory Question:

    - Total Marks: 50

    - Technical Marks: 40

    - Professional Skills Marks: 10

- Examines technical syllabus sections A, B, and C. This means except for:

    - The Balanced Scorecard
    - Performance pyramid
    - Fitzgerald and Moon – Building Block Model
    - Activity based management
    - Value based management
    - Problems encountered in planning, controlling and measuring performance levels, e.g. productivity, profitability, quality and service levels, in complex business structures
    - Impact on performance management of the use of business models involving strategic alliances, joint ventures and complex supply chain structures

- All four professional skills are tested in this section.

- The skill "Communication" is exclusive to Section A, aligning with specific answer formats (e.g., report format).

Section B:

- Two Compulsory Questions:

  - Total Marks (per question): 25

  - Technical Marks (per question): 20

  - Professional Skills Marks (per question): 5

- One question draws mainly from Syllabus section D. The other may cover any technical syllabus section(s).

  Areas in the Syllabus section D:

  - The Balanced Scorecard
  - Performance pyramid
  - Fitzgerald and Moon – Building Block Model
  - Activity based management
  - Value based management
  - Problems encountered in planning, controlling and measuring performance levels, e.g. productivity, profitability, quality and service levels, in complex business structures
  - Impact on performance management of the use of business models involving strategic alliances, joint ventures and complex supply chain structures

- Each question tests a combination of professional skills, not necessarily in even distribution.

- Minimum of two skills from Analysis and Evaluation, Scepticism, and Commercial Acumen will be examined.

- All APM questions include Analysis and Evaluation.

Professional marks:

- Communication skills
- Analysis and Evaluation skills
- Scepticism
- Commercial Acumen

First Professional Mark: Communication:

- **Report format and structure - use of headings/sub-headings and introduction.**
- **Style – formal style, such as To, From, Date, Subject, with the report format correctly.** This report recommends and justifies critical success factors (CSFs) and key performance indicators (KPIs) for DP based on the four critical areas of performance." This sentence maintains a formal tone by clearly stating the purpose and content of the report.
- **Language – always use active voice.** For example, This report recommends and justifies critical success factors (CSFs) and key …justifying).
- **Clarity – use simple language,** such as 'The 3Es above link to the CSFs and KPIs in the area of effectiveness.' Here, the language is clear, referencing previously introduced concepts.
- **Effectiveness of communication:**
  - Relevance to Scenario: The content you provided is deeply …strong grasp of context.
  - Addressing Key Points: The answer touches on all the critical areas mentioned, such as CSFs, KPIs, VFM, and the implications of league tables…. understanding of the issues at hand.

Example of the report: - Taken from Specimen paper (2022)

> **To: The CEO, Department of Internal Affairs (DIA)**
> **From: An Accountant**
> **Date: 1 September 20X5**
> **Subject: Performance measurement and management at Deeland Police (DP)**
> **I. Critical Success Factors (CSFs) and Key Performance Indicators (KPIs)**
> The CSFs must follow from the four areas which are addressing the overall mission. The four key areas to consider are:
> 1. **Protecting and supporting those at risk of harm**
> 2. **Ensuring criminals are caught and brought before the courts**
> 3. **Achieving long-term sustainable solutions to the causes of crime**
> 4. **Addressing new forms of crime arising in the virtual world**
>
> The first three areas are ongoing in the activities of DP, and the Minister wants improvement in each. The adviser's suggested CSFs all appear to be reasonable improvements to manage the Minister's concerns about the vagueness of the key areas as follows:
>
> 1. **Greater protection and more support for those at harm** (this is a straightforward improvement to the existing position in this area).

2. **Be better at catching criminals** (bringing them before the courts does not appear to be critical as it seems to automatically follow).
3. **Reducing the causes of crime by increased involvement with local communities** (improvement using the mechanism suggested).

The fourth area is relatively new, so it will be more in the nature of a separate project to:

4. **Create a task force to develop skills in detection and prosecution of virtual crime** (as desired by the Minister).

The KPIs for the four CSF areas:

Area 1 The CSF breaks into two parts – protecting and supporting. There should be a KPI measuring the change in each of these areas:

*   **Percentage change year on year of the number of victims of violent crimes**, once they are identified as at risk (a register of 'at risk' people would need to be created).
*   **Percentage change of staff hours spent with each victim on average in support activities**.

Neither of these KPIs can currently be measured as the data is not collected. The first point could be indirectly addressed by measuring the number of victims of violent crimes, which should see a fall if those at risk are better protected.

Area 2 This CSF is looking at what is often referred to as the clear-up rate, which is the percentage of crimes where the criminal is caught. The data given allows this to be measured through:

*   **The percentage change in the percentage of crimes solved** (although care must be taken that 'solved' is not the same as 'criminal caught' as there may be cases where the police know the criminal, but they escape capture).

The second part of bringing the criminal before the courts once caught does not appear to be a critical area needing measurement since this appears to be a low-risk possibility. The critical area might be better stated as **'Ensuring crimes are solved and criminals are brought before the courts'** since the second part would then be an appropriate area to measure.

Area 3 From the data in Appendix 1, the KPI could be:

*   **The percentage change in the total number of crimes in Deeland in the year**.

The effect of reducing the causes of crime would be to create a long-term trend downwards in this measure. It may be better to use a three-year moving average of the change as a result. However, there may be many factors that cause such changes, including the number of police officers, and so the underlying causes of crime may not be accurately measured. The suggested KPI does not capture whether the changes are sustainable in the long term, which will be difficult to do.

Area 4 The KPIs for the fourth area require examination of the number and qualifications of those working on the task force on virtual crime. The data in Appendix 1 is not sufficient to measure this. KPIs could include:

*   **Percentage of roles in the task force filled** (this requires that there is a plan for the organization of a suitable task force, which may be complicated as this is a new area where knowledge of how many staff and what qualifications they should have may not be present).
*   **Percentage of virtual crimes reported which are solved** (shows the effectiveness of the task force).

II. Value for Money (VFM)
The standard criteria for analysis of the value for money of a service are:

- **Economy** – the optimization of the resources which the organization has; ensuring the appropriate quality of input resources are obtained at the lowest cost;
- **Efficiency** – the optimization of the process by which inputs are turned into outputs;
- **Effectiveness** – how the outputs of the organization meet its goals.

The 3Es above link to the CSFs and KPIs in the area of effectiveness. The KPIs measure the achievement of the goals of DP and all relate to outcomes rather than processes or inputs in this case.

In order to judge VFM, comparison can be made internally to the historic performance of DP, but it should also be benchmarked against external organizations. The need for external data is also reflected in the desire to benchmark in league tables, although no data is given for this here, and so the VFM can only be judged against previous years' data.

Considering the situation at DP specifically:
- **Economy** could be measured by looking at the cost of buying inputs; the principal input is staff (90·1% of total costs), and so the cost per employee ($40,318) is relevant. This represents a 3·8% reduction on the previous year, although it should be noted that the mix of staff is changing with more administrative staff replacing police officers who may be more expensive as they are more qualified. It would be useful to obtain the data on the average police officer salary as they make up 75·5% of the total staff and they are critical to the achievement of outcomes.

As noted above, in order to judge whether this is good or bad, the Department should also compare this to external figures such as the national average wage and, also, the average salary of staff in other police forces in similar countries.

- **Efficiency** can be measured in a number of different ways.

	20X5	20X4	20X3
Solved crimes per police officer	7·855	7·918	7·915
Solved crimes per employee (police officers and admin staff)	5·929	5·994	6·022
Police officers per 1,000 populations	3·19	3·23	3·30

The trend in the number of police officers is downward, which would suggest improvement. However, the more important outcome is not the resources poured in but the crime results, and these show that by decreasing the number of police officers, the number of crimes which each is solving is falling (down 0·8% from 20X3). Performance in this area is, therefore, poor.

Effectiveness must be measured against DP's goals in its four areas:
1. **Protection and support of those at risk** – the percentage of violent crime remains flat over the three years of data at 20% of the total number of crimes reported. This suggests that protection remains broadly unchanged. As noted above, there is no measure of support provided.
2. **Solving crimes** – the clear-up rate has fallen from 56·7% to 55·0%. This probably reflects the change in staff mix as police officer numbers have fallen.
3. **Causes of crime** – the trend is clearly upwards with an increase of 2% each year over the last two years which may again reflect the falling numbers of police officers in DP.
4. **Virtual crime** – as noted above, it is not possible to measure the achievement of the creation of the task force from the data provided.

III. League Tables
The use of league tables effectively benchmarks performance and can have a positive effect on behavior. The sharing of data on performance can indicate areas of best practice and so offers the possibility of improving performance by copying that best practice. Additionally, the use of league tables gives, by the rank in the table, a clear, immediate answer to questions of relative performance.

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However, the use of league tables only measures relative performance. The best force in the table could still be producing an unacceptable performance in absolute terms. The different forces in different countries will face different external environments. Each force will have to react to the economic situation in that country and may allocate resources differently according to the priorities of the government of that country. So, it will be difficult to get a single measure, such as the rank in the league table, to balance these competing factors.

This leads on to another area which will prove difficult, which is how to rank the different forces. Usually, there is a scoring system giving points across different areas for each force's performance. The selection of the areas and the weighting given to them within the rank score will affect the position of the different forces. In an example of 'what gets measured, gets done,' it may be that the DP management will change their priorities from those given by the DIA to those measured in the rank score and so undermine the alignment of their behavior with the given mission of DP. Therefore, to be of value to the Minister, the calculation of the rank must encompass the key variables which will drive DP's desired performance.

Therefore, there is a link between league tables and employee behavior which comes from the setting of targets based on the league table rank.

The impact on the employees includes whether they feel a sense of accountability for the score. If the police officers do not feel that they can affect the rank, then they may ignore it or actively undermine it in public through their union's public statements. This will present the government with difficulty as the police are considered the experts in this area of public policy and their criticism will carry weight with the electorate.

Specifically, the police officers may be demotivated by the league tables if they feel:
(a) that the league table rank does not reflect the valuable work which they do (for example, in creating the new virtual crime task force); or (b) that the rank is driven by factors outside of their control. (For example, the budget for the force may be cut, as appears to be happening with DP, or there may be a link between the number of crimes reported and the economic conditions in Deeland which they do not have power to affect).

Mastering the APM requires not just crunching numbers but interpreting them, …thorough, balanced, and rooted in the scenario's context.

Example:

Scenario: A manufacturing company has experienced declining profits. The CEO attributes this to increased production costs, while the Production Manager …adopting a new performance management model to address these issues.

1. Use of Data:

- **… Skills** - **Example**: "When analyzing the financial statements, it's evident that while production costs have increased by 5%, sales revenue …beyond just production."

- **Data ..** - **Example**: "The production data from the past six …stable labor hours, this suggests machinery inefficiency might indeed be a valid concern."

- **…**conditions and the internal challenges highlighted, it's plausible that both production costs and machinery inefficiency have contributed to the declining profits."

2. … Appraisal:

- **…** - **Example**: "It's essential to consider both internal factors like machinery age and external factors like market demand when evaluating our current predicament."

- **Decision Making** - **Example**: "Given the data, a two-pronged approach might be best: addressing immediate machinery concerns … production costs."

3. Use of … Information:

- **… Examples** - **Example**: "The Production Manager highlighted a particular machine that has been malfunctioning frequently. If this …ortion of production, its inefficiency might be a primary contributor to the overall decline."

- **Comprehensive …** - **Example**: "When evaluating the new performance management model, it's crucial to consider not just its potential efficiency gains but also the transition costs, training needs, and potential disruptions."

Approaching the APM with a critical mindset, asking "why" and "how", and challenging the status quo where necessary will demonstrate strong scepticism skills.

Example:

Scenario: A manufacturing company has experienced declining profits. The CEO attributes this to increased production costs, while the Production Manager …adopting a new performance management model to address these issues.

1. Challenge Information

- **Contradictory Evidence** - **Example**: If the scenario provides financial data that shows production costs have remained stable, you could challenge ..production costs, contradicting the CEO's assertion."

- **Question Assumptions** - **Example**: "While the suggested performance management model assumes a linear relationship between machinery …not lead to increased productivity due to external factors like market …

2. Deep Probe

- **Interrogate Actions** - **Example**: "The Production Manager's decision to not …other factors like training and machinery maintenance considered?"

3. Data Adequacy

- **Measurement Limitations** - **Example**: "The provided KPIs focus heavily on …product returns or defects, we can't adequately measure overall production success."

- **Missing Information** - **Example**: "There's no mention of competitor performance or market trends in the provided information, which might …

4. Appropriateness of Metrics

- **….**solely on it can be misleading. Without considering metrics like net profit margin or asset turnover, we might miss other financial health indicators."

5. Potential Pitfalls

- **Limitations & Challenges** - **Example**: "While the new performance …account for the initial training costs and potential downtime during its implementation."

- **…**machinery will directly lead to profit growth is too simplistic. Factors like market positioning, product quality, and employee training also play substantial roles."

6. Root Causes

- **…**: "Before challenging the CEO's claim on production costs, it's essential to delve deeper into the cost components—raw materials, labor, overheads—to understand the root of the problem."

7. Professional Judgement

- **Informed ….**mplete overhaul of the performance management system, ensuring our decisions are in line with the company's immediate needs and long-term goals."

Doing well in the APM is about more than just book knowledge; it's about truly understanding … making recommendations that make sense for the business and fit the market.

Example:

Scenario: A manufacturing company has experienced declining profits. The CEO …believes it's due to outdated machinery. The company's board is considering adopting a new performance management model to address these issues.

1. Practical & Plausible Recommendations

- **..** - **Example**: "Given that the company is in the manufacturing sector, it's essential to consider industry standards. Thus, updating machinery might be more critical than a new performance model if similar industry players are using advanced technology."

- **…bility** - **Example**: "Instead of entirely replacing all machinery, a phased approach might be more practical, considering budget constraints and training needs."

2. …nformation

- **Internal and …**: "While our internal financial data suggests that machinery updates are needed, external factors like upcoming industry regulations on machinery standards make it even more urgent."

- **…tions** - **Example**: "If our company's growth strategy assumes stable production costs, we need to reassess, especially with increasing global raw material prices."

…

- **Past Actions** - **Example**: "Previously, the decision to not invest in machinery might have been valid due to the economic downturn. However, persisting with outdated machinery now could lead to more significant losses."

- **Future Implications** - **Example**: "Looking ahead, if we don't address the …market position and customer base."

…

- **…**alone won't help if our machinery continues to be inefficient. It's imperative to tackle both for a long-term commercially viable solution."

…

- **…**proposal, we need to consider the ethical implications. Will it lead to job losses? If so, do we have measures in place to support affected

employees? Ensuring we approach changes ethically can prevent potential future backlash and reputation damage."

General Advice from ACCA Examining Team:

1. Prioritize Crucial Points: Focus on convincing and compelling arguments, adding less important points only if necessary.

2. Demonstrate Deep Understanding: Integrate information from various parts of the scenario.

3. Avoid Irrelevant Information: Ensure professionalism by addressing requirements directly.

Time Management with Practical Examples:

1. **Reading and Planning Time Allocation:**

   - Allocate time for reading the examination requirements (e.g., 15 minutes).

   - For a total of 180 technical marks in section A, allocate 2.25 minutes per mark (180/80).

   - Allocate 90 minutes for section A and 45 minutes for each section B question.

   - If a candidate spends 15 minutes reading and planning, they should aim to complete section A in 90 minutes and each section B question in 45 minutes.

2. **No Specific Reading and Planning Time:**

   - If not allocating a specific reading and planning time, use a more ..

   - …

   - Allocate 97 minutes for section A and 49 minutes for each section B question.

   - If a candidate opts not to allocate specific time for reading and planning, they should aim to complete section A in 97 minutes and each section B question in 49 minutes.

Chapter 1 Strategic Management Accounting

Contents:

- Session 1: Strategic Performance Management and Measurement for Planning and Control
- Session 2 Critical Success Factors and Key Performance Indicators
- Session 3: Performance Tools: SWOT, PEST, BCG, Balanced Scorecard, Porter's Strategies, 5 Forces
- Session 4: Benchmarking: Application and Evaluation
- Session 5: Managing Risk and Uncertainty in Strategic Planning, and Risk Appetites

Session 1: Strategic Performance Management and Measurement for Planning and Control

1.1 Difference between strategy and performance management:

- Strategy like map, performance management like compass.
- Performance measurement reveals progress and narrative.
- Numbers tell a story about organizational advancement.
- Every organization deals with balancing long-term goals and short-term needs. Finding the right balance is like creating art, shaping the company's future.

1.2 Planning and Control: Strategic vs. Operational Levels:

1.2.1 Strategic Level:

- **Visionary Thinking:** Begin with a broad vision or mission.
- ..
- **Resource Allocation:** Allocate capital to R&D, acquisitions, etc.
- **Stakeholder Engagement:** Align with investors and major stakeholders.

1.2.2 Tactical Level:

- ..
- **Resource Allocation:** Assign resources to initiatives.
- **Department Coordination:** Coordinate inter-departmentally.
- **Progress Monitoring:** Regular checks to adjust and report.

1.2.3 Operational Level:

- **Task Efficiency:** Manage daily operations, track progress.
- ..
- **Performance Tracking:** Monitor KPIs like sales, response times.
- **Adaptive Response:** Quick feedback leads to adjustments.

1.3 What gets measured, gets done.

- "You can't manage what you can't measure."
- "If you're not keeping score, you're just practicing."
- "What's inspected is respected."
- "If it matters, measure it."

1.3.2 What it means: (taking the past exam question Freuchie as an example)

1. **Attention on Priority (1 mark):**

   - **Central Idea:** Metrics guide the allocation of company resources, making measured areas a focal point.

   - **Freuchie Context:** If Freuchie continuously measures inventory ..could lead to decisions like limiting the clothing range.

2. **Behavioral Influence (1 mark):**

   - **…**employees, especially if their evaluations or rewards are based on these metrics.

   - **Freuchie Context:** If Freuchie focuses on revenue and dividends in its performance evaluations, this may inadvertently result in staff neglecting other crucial aspects like profit margins.

3. **Accountability (1 mark):**

   - **Central Idea:** What gets measured holds someone accountable because the performance against those metrics is visible.

   - **Freuchie Context:** Without metrics on individual store profitability, there's a lack of accountability for store managers regarding the performance of their individual stores.

4. **Continuous Improvement (1 mark):**

   - **Central Idea:** By measuring regularly, companies can spot trends and adjust strategies accordingly.

   - **..**appearance and clothing range attractiveness, they might make continuous improvements in these areas.

5. **Impact of Wrong Metrics (1 mark):**

   - **Central Idea:** Incorrect metrics can misdirect resources and focus.

   - **Freuchie Context:** Over-monitoring inventory losses might detract from the main goal of having diverse and attractive clothing ..

6. **Limitations of Over-Focusing (1 mark):**

    - **Central Idea:** Relying heavily on a few metrics can lead to neglecting others.

    - **Freuchie Context:** Concentrating solely on revenue might lead to overlooking other important metrics like customer satisfaction or store aesthetics.

7. **Tunnel Vision (1 mark):**

    - **Central Idea:** Overemphasis on specific metrics can lead to tunnel vision, where broader goals are overlooked.

    - **Freuchie Context:** Focusing only on measurable aspects might misalign with Freuchie's broader objectives like overall profitability or customer satisfaction.

8. **..**

    - **Central Idea:** While measurement is essential, a holistic view is equally important.

    - **Freuchie Context:** Freuchie's management should ensure a balance between measured outcomes and broader business goals for overall growth.

1. **Define**: Clearly define what needs to be achieved. This gives clarity about what exactly needs to be measured.

   - Example: Instead of a vague goal like "increase sales," be specific: "Increase online sales by 10% in Q3."

2. **Determine Metrics**: Decide on the metrics or KPIs (Key Performance Indicators) that will provide insights into the progress or success of the defined objective.

   - Example: For the above goal, the metric could be "Percentage increase in online sales."

3. **Data Collection**: Ensure that there are systems, tools, and processes in place to collect relevant data.

   - Example: Use web analytics tools to track online sales data.

4. **Analyze**: Evaluate the collected data to ascertain progress, trends, and areas of improvement.

   - Example: Comparing monthly online sales figures to determine if there's an upward trend.

5. **Adjust**: Based on the analysis, make necessary adjustments or changes to strategies or processes to better achieve the objectives.

   - Example: If online sales are not increasing, consider revising marketing strategies or improving the user experience on the website.

6. **Review**: Periodically review the metrics and KPIs to ensure they're still relevant to the objectives. As business goals evolve, what you measure might also need to change.

   - Example: As the business grows, focus might shift from just increasing sales to improving profit margins.

Past exam question reference: Sept/Dec 2021 Freuchie (iii)

1.4 Problems of Performance Measurement:

Misrepresentation:

- Tweaking reports to show good results. Example: Saying 98% of customers are happy, but only asking a few customers.

Gaming:

- Changing actions to meet rewarded targets, even if not beneficial long-term. Example: Cutting costs to show better short-term profits, but it harms long-term growth.

Misinterpretation:

- Overlooking the bigger picture and only seeing one aspect. Example: Seeing good financial results but ignoring poor customer feedback.

Short-termism (myopia):

- Focusing only on immediate results and ignoring the future. Example: Prioritizing quick profits (ROCE) over long-term company growth.

Measure Fixation:

- Obsessing over one target, ignoring other important aspects. Example: Only focusing on cutting costs, sacrificing product quality.

Tunnel Vision:

- Only paying attention to measured targets and ignoring unmeasured areas. Example: Focusing solely on financial returns and neglecting employee well-being.

Sub-optimisation:

- Only pushing what's measured, missing out on overall best results. Example: Overemphasizing new customer acquisition and neglecting current customer satisfaction.

Ossification:

- Sticking to an outdated measurement system, especially if it shows good results. Example: Only surveying certain customers who usually give positive feedback.

Session 2 Critical Success Factors and Key Performance Indicators

2.1 Terminologies:

Performance:

Performance can be described as the degree of effectiveness with which a task or operation is carried out.

Objectives:

Objectives refer to the specific targets that an organization aims to accomplish.

Critical Success Factors:

A critical success factor (CSF) is a fundamental area in which an organization must excel to ensure its success.

Performance Indicators(Metrics or Measures) and Key Performance Indicators:

Performance indicators, also known as performance measures, are techniques utilized to evaluate performance.

2.2 Example of CSF and KPIs based on:

1. Structure of the Industry
2. Competitive Strategy, Position, & Location
3. Environmental Factors
4. Temporary Factors
5. Functional Managerial Position

Critical Success Factor (CSF)	Key Performance Indicators (KPI)
1. Structure of the Industry:	
Car Industry: Efficient dealer network organization	- Number of active dealerships - Dealer satisfaction scores
Food Processing: Continual new product development	- Number of new products launched annually - Revenue from new products
Banking: Regulatory compliance and cybersecurity	- Number of compliance breaches - Frequency of cybersecurity audits
E-commerce: Robust platforms & user experience	- Website uptime percentage - User satisfaction scores
Pharma: Continuous R&D for new drug development	- Number of patents filed - R&D expenditure as % of revenue
Tourism: Customer service & experiences	- Customer satisfaction ratings - Repeat bookings percentage
Real Estate: Location and property valuation	- Average property turnover time - Accuracy of property valuations
Agriculture: Crop rotation & sustainable farming	- Crop yield per hectare - Percentage of sustainable farming practices
2. Competitive Strategy, Position, & Location:	
Differentiation: Unique product/service features	- Customer perceived value scores - Product return rates
Cost Leadership: Economies of scale	- Production cost per unit - Gross margin percentage
Industry Position: Focus on niche markets	- Market share in niche segments - Customer loyalty scores in niche
Geographic Location: Efficient logistics	- Average delivery time - Logistics cost as % of sales

3. Environmental Factors:	
Fuel-Dependent: Adapting to global oil prices	- Fuel expenditure as % of revenue - Fuel efficiency metrics
Digital Age: Adjusting to digital tech advancements	- Technology adoption rate - IT infrastructure uptime
Fast Fashion: Ethically produced clothing	- Percentage of ethically sourced materials - Supplier audit results
Air Travel: Meeting international aviation standards	- Compliance with aviation standards - Fuel efficiency of fleet
Packaging: Sustainable packaging solutions	- Percentage of recyclable packaging - Waste reduction rate
Manufacturing: Advanced manufacturing technologies	- Production efficiency metrics - Downtime due to tech failures
4. Temporary Factors:	
Product Recalls: Stringent quality checks	- Number of products recalled - Quality assurance pass rate
Market Anomalies: Rapid scaling of production	- Time to scale production - Meeting demand-to-supply ratio
5. Functional Managerial Position:	
Production Managers: Emphasis on product quality	- Defect rate in products - Quality check pass rate
Marketing Managers: Brand visibility	- Brand recognition scores - ROI on marketing campaigns
Finance Managers: Ensuring liquidity	- Current ratio - Days sales outstanding

Session 3: Performance Tools: SWOT, PEST, BCG, Porter's Strategies, 5 Forces

Introduction:

- Performance management links strategy to execution.
- Tools like SWOT, PEST, BCG Matrix guide analysis.

3.1 Model 1. PEST Analysis

To analyze the external macro-environmental factors that might affect an organization.

PEST Factors	Key Performance Indicators (KPIs)	Explanation
Political	Regulatory Compliance Rating	Measures organization's adherence to laws and regulations (Tax, Employment, Environmental, Monopoly etc) by internal legal department.
	Political Stability Index	Gauges the stability of the political environment.
Economic	GDP Growth Rate	Monitors economic expansion or contraction.
	Consumer Confidence Index	Measures consumer sentiment towards economy.
	Purchasing Power	Assesses consumer spending ability based on income.
Social	Demographic Shifts	Analyzes changes in population and age groups through data such as age, gender, ethnicity, and location from census reports, surveys, or customer databases. Calculate the percentage change in each demographic category to understand the extent of the shifts.
	Social Media Engagement	Monitors trends through online interactions.

	Diversity Index	Measures diversity within target market or workforce.
Technological	**Research & Development Investment**	Tracks investment in innovation and development.
	Adoption Rate of Emerging Tech	Measures how quickly new technologies are adopted through surveys, user registrations, app downloads, or sales data related to the emerging technology.
	Patent Activity	Evaluates the number of patents for tech advances.

3.2 Model 2. Porter's Five Forces

To analyze the competitive forces within an industry.

Five Forces Element	Key Performance Indicators (KPIs)	Calculation	Case Information	Calculation Result
Competitive Rivalry	**Market Share Percentage**	(Company's Sales / Total Market Sales) * 100%	A company's sales are $10 million out of a total market sales of $40 million.	(10 / 40) * 100% = 25%
	Annual Market Growth Rate	((Current Market Size - Previous Year Market Size) / Previous Year Market Size) * 100%	Current market size is $150 million, and previous year market size was $135 million.	((150 - 135) / 135) * 100% = 11.11%
	Market concentration ratio	Market share of top competitors added up.	Market share of top companies A and B are 40% and 20%. Near 1 = Monopoly, and near 0 = perfect competition.	40%+20% = 60%
Buyer's Bargaining Power	**Buyer Concentration Ratio**	(Total Purchases from Top Buyer / Total Purchases by All Buyers) * 100%	The top buyer's purchases are $3 million, and total purchases by all buyers are $10 million.	(3 / 10) * 100% = 30%
	Buyer Size Distribution	(Number of Small Buyers / Total Number of Buyers) * 100%	There are 200 small buyers out of a total of 450 buyers.	(200 / 450) * 100% = 44.44%
	Buyer Switching Complexity	(Number of Switching Steps Required / Total Steps in Switching Process) * 100%	The switching process requires 4 steps out of a total of 10 steps. Steps could be looking for new suppliers, requesting quotation, negotiating prices and	(4 / 10) * 100% = 40%

			terms, testing and training.	
	Price Sensitivity Index	(Percentage Change in Quantity Demanded / Percentage Change in Price)	Quantity demanded changed by 20% due to a 10% change in price.	(20 / 10) = 2
Supplier's Bargaining Power	**Supplier Count in Market**	(Number of Suppliers Offering Key Component / Total Number of Suppliers) * 100%	There are 10 suppliers offering a key component out of a total of 50 suppliers.	(10 / 50) * 100% = 20%
	Supplier Size Distribution	(Number of Small Suppliers / Total Number of Suppliers) * 100%	There are 30 small suppliers out of a total of 50 suppliers.	(30 / 50) * 100% = 60%
	Supplier Transition Difficulty	(Time and Cost to Transition to New Supplier / Average Time and Cost to Transition) * 100%	Time and cost to transition to a new supplier is 2 weeks and $20,000. Average time and cost to transition in the industry are 3 weeks and $25,000. Costs arise due to steps in changing suppliers such as finding new suppliers, negotiating terms. Average costs and time can be found from interviews, industry reports etc.	(2 weeks + $20,000) / (3 weeks + $25,000) * 100% = 84.62%
	Supplier Quality-Price Ranking	(Quality Score / Price Score)	**Supplier A:** • Quality Score: 85 (out of 100) • Price Score: $100 (per unit) The supplier is more attractive with higher the ratio.	Supplier A Quality-Price Ranking = (85 / 100) / $100 = 0.85

Threats from Potential Entrants	**Brand Recognition Index**	(Brand Recognition Score / Maximum Brand Recognition Score) * 100%	Brand recognition score is 80 based on survey distributed to our users, out of a maximum score of 100.	(80 / 100) * 100% = 80%
	Customer Retention Rate	((Number of Customers - Lost Customers) / Number of Customers) * 100%	Number of customers is 500, lost customers are 20.	((500 - 20) / 500) * 100% = 96%
	Patents Protection Ratio	(Number of Patents / Total Potential Patents) * 100%	There are 10 patents out of a potential total of 20 potential patents.	(10 / 20) * 100% = 50%
Threats from Substitutes	**Substitutes Price Ratio**	(Price of Substitutes / Price of Product) * 100%	Price of substitutes is $400, price of the product is $600. • High ratio = our product is more attractive in terms of prices • Low ratio = substitute is more attractive in terms of prices	($400 / $600) * 100% = 66.67%
	Substitutes Performance Rating	(Performance Score of Substitutes / Maximum Performance Score	Automotive industry where criteria for evaluation is Acceleration (0-60 mph). **Acceleration:** • EcoDrive (our model): 6.5 seconds • EliteElectro (substitute): 5.0 seconds **Scoring System:**	Acceleration: EcoDrive is 1.5 seconds slower. Penalty: 1.5 seconds / 0.5 seconds per penalty * 10 points = 30 point reduction. Score: 50 - 30 = 20 points/50 = 40%.

			Each category has a maximum score of 50 points (totalling 100 for both). **For Acceleration:** For every 0.5-second increase from EliteElectro's benchmark of 5.0 seconds, there's a reduction of 10 points from the maximum of 50.	Thus, EcoDrive's performance is rated at 40% in comparison to EliteElectro.

3.3 Model 3. Boston Consulting Group (BCG) Matrix:

3.3.1. Introduction to the BCG Matrix:

- The Boston Consulting Group (BCG) matrix is a strategic management tool that assesses a company's business units based on their relative market shares and market growth.

- The matrix categorizes these units into four segments: Dogs, Stars, Cash Cows, and Question Marks (or Problem Child).

3.3.2. Key Elements:

- **Relative Market Share:** It indicates the strength of the business in its market, compared to competitors. Higher relative market shares imply that the business has a competitive advantage and thus can enjoy better margins.

- **Market Growth Rate:** This indicates the attractiveness of the market. High growth markets can be resource-intensive but offer better returns on investment.

3.3.3. Practical Application to case studies:

- Classification of the product line, or other segments into different categories, such as Dogs, Question Marks, Cash Cows or Stars.

- **Management Implications:**

  - **Dogs (Product Line A):**

    Implication: These product lines have low market share in a low growth market. They might not be generating significant profits and could be a drain on organizational resources.

    Practical Insights:

    1. **Resource Allocation**: Be cautious with additional investments; the ROI might be minimal due to the market conditions.
    2. **Operational Efficiency**: Ensure maximum efficiency in operations. This could involve optimizing production processes, reducing waste, or reconsidering pricing strategies.
    3. **Strategic Benefits Analysis**: Determine if the product line offers any strategic benefits, such as drawing customers towards other, more profitable products.

4. **Divestment Consideration**: If not strategically essential and no hope of turnaround is visible, consider divesting or discontinuing the product line.

- **Question Marks (Product Line B):**

    Implication: These product lines show potential but haven't secured a dominant market position yet. They could become Stars with the right investment or Dogs if neglected.

    Practical Insights:

    1. **Market Research:** Dive deep to understand the barriers to achieving a larger market share.
    2. **Strategic Investments:** Allocate resources to areas that promise the best ROI, whether that's improving product features, marketing, or expanding into new markets.
    3. **Risk Analysis:** Every investment decision should be backed by a comprehensive risk analysis.
    4. **Monitoring & Quick Reactions:** Stay alert to market responses and be ready to adjust strategies quickly.

- **Cash Cows (Product Line C):**

    Implication: These are the primary revenue generators. They have a dominant market share in a stable or low-growth market.

    Practical Insights:

    1. **Maintain Position**: Ensure that the product line maintains its dominance. This might mean periodic updates, customer feedback loops, and engagement strategies.
    2. **Cost Efficiency**: Enhance profitability through optimizing costs.
    3. **Fund Allocation**: Use the profits generated by this product line to fund and nurture other promising product lines.
    4. **Stay Vigilant**: Periodically check market dynamics to ensure the product line remains relevant.

- **Stars (Product Line D):**

    Implication: These are high-growth, high-market-share products. They are well-positioned in the market and show a lot of promise, but they might also be consuming a lot of resources because of the growth they are experiencing.

    Practical Insights:

    1. **Strategic Investment:** Ensure that this product line receives the resources needed to capitalize on its potential. This could involve ramping up production, enhancing marketing efforts, or refining the product based on user feedback.

2. **Competitor Analysis:** Regularly analyze the competitive landscape. Being in a dominant position means that competition will be eager to capture some of that market share.
3. **Innovation & Improvement:** Continuously enhance the product or service to stay ahead of the competition.
4. **Diversification:** Consider diversifying within the same product line to cater to different market segments or needs.

3.3.4. Limitations of the BCG Matrix:

- **Simplicity:** The matrix simplifies business units into four categories, which may not truly reflect their potential or challenges.

- **Static Model:** Doesn't account for changing market dynamics or interdependence between business units.

- **Dependence on Market Share:** Market leadership or share doesn't always translate to profitability.

3.3.5. Alignment with Performance Management and Remuneration:

For Dogs (Product Line A):

- **Cost Control Metrics:** Since Dogs are low in market share and growth, there should be strong emphasis on efficiency and cost management. Key performance indicators could focus on minimizing wastage and optimizing operational expenses.
- **Exit Strategy Incentives:** If the decision is to divest or phase out this product line, teams that execute the exit efficiently and extract the best value could be rewarded.
- **Customer Transition:** Ensure that existing customers are transitioned to other product lines or are retained in some capacity. Metrics around customer communication, satisfaction, and retention during the transition phase should be prioritized.
- **Resource Reallocation:** Teams or departments that effectively redirect resources from the Dogs to other more promising product lines could be incentivized.

For Question Marks (Product Line B):

- **Market Research Metrics:** As these products have potential but are uncertain, significant emphasis should be placed on understanding market needs. KPIs could focus on customer surveys, competitor analysis, and market testing.
- **Investment Return Analysis:** Given that these products might require further investment, teams that can yield a significant return on investments made could be rewarded.

- **Product Development:** Prioritize refining the product based on feedback and insights. Bonuses can be tied to product improvements and innovations that lead to increased market share.
- **Growth Initiatives:** Teams that come up with and implement strategies to shift these products towards becoming Stars can be incentivized.

For Cash Cows (Product Line C):

- **Consistency Metrics:** Given that Cash Cows are stable and reliable sources of income, KPIs should emphasize consistent performance, maintaining quality, and service delivery standards.
- **Cost Optimization:** While they generate consistent revenue, there's always room for improving profitability. Incentives can be offered for teams that enhance profit margins without compromising on product or service quality.
- **Customer Loyalty Programs:** As Cash Cows often have a loyal customer base, teams that initiate and manage effective customer loyalty programs can be rewarded.
- **Risk Management:** Given their significance to the overall revenue, metrics should be in place to identify potential risks and threats early on. Teams that proactively manage and mitigate risks associated with Cash Cows can be incentivized.

For Stars (Product Line D):

- **Growth Metrics:** Key performance indicators should heavily emphasize market expansion, capturing more market share, and ensuring scalability to handle the growth.
- **Innovation Rewards:** Given the criticality of staying ahead in this segment, bonuses or incentives could be offered for innovations that further solidify the product's position.
- **Customer Retention:** As the product line grows, ensuring customer satisfaction becomes crucial. Performance metrics around customer retention, feedback loops, and service quality should be considered.
- **Resource Management:** Efficiently managing the vast resources that Stars often consume is vital. Teams that optimize resource allocation without compromising growth can be rewarded.

3.3.6. Conclusion:

While the BCG matrix provides an insightful starting point to understand business units' positioning and potential, it should be used in conjunction with other tools and metrics for a more comprehensive strategy formulation and performance assessment.

3.4 Model 4. Porter's Generic Strategies:

The rest of the content will be shown in the course package.