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**BUSINESS**

**9609/32**

Paper 3 Case Study

**October/November 2017**

**3 hours**

No Additional Materials are required.

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**READ THESE INSTRUCTIONS FIRST**

An answer booklet is provided inside this question paper. You should follow the instructions on the front cover of the answer booklet. If you need additional answer paper ask the invigilator for a continuation booklet.

**Section A**

Answer **all** questions.

**Section B**

Answer **one** question.

You are advised to spend no more than 40 minutes on Section B.

The businesses described in this question paper are entirely fictitious.

The number of marks is given in brackets [ ] at the end of each question or part question.

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This document consists of **6** printed pages, **2** blank pages and **1** Insert.

## Asian Domestic Products (ADP)

ADP is a public limited company. It manufactures domestic appliances such as washing machines, refrigerators and hairdryers. ADP has 11 factories in 6 countries. ADP's Head Office is based in one of these – country X. Each factory produces one type of product and is operated as a profit centre. Asif is the Chief Executive Officer. He was appointed two years ago. He was formerly the Finance Director of a car manufacturing business. ADP's executive appointment committee selected him because he seemed to have good strategic ideas for improving the performance of the company.

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### Financial performance

Shareholders have recently criticised ADP's financial performance and some decisions taken by senior management. In particular, they oppose the plan to reduce dividends announced by Asif at the Annual General Meeting last year. He justified this decision by saying: 'The dividend reduction will allow us to invest more in new product development. This will lead to higher profit in future years.'

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This long term strategy was announced at the same time as Asif's plan to raise short term profitability in 2018 was revealed. For each product this plan involves:

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- Raising prices to retailers by 5%. Asif stated: 'Average price elasticity of demand is estimated to be  $-0.5$ .'
- Cutting cost of sales by 3% per unit. This will be achieved by forcing suppliers to accept lower prices. Suppliers who do not agree to price cuts will lose future contracts.
- Cutting overheads in each factory by 10%. This will be achieved by management delayering and switching some promotions from traditional media to the Internet.

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Asif told senior directors: 'Based on the 2017 accounts for each factory and assuming no other changes, these measures should increase profit substantially. Here is some data for the washing machine factory in 2017 (see Table 1). We can now forecast how these changes will improve the factory's profitability in 2018.'

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**Table 1: Management accounting data for washing machine factory, 2017**

Units sold	2m
Average selling price of washing machines to retailers	\$200 per unit
Cost of sales	\$200m
Overheads of washing machine factory	\$150m
Allocation of Head Office overheads to washing machine factory	\$25m
2017 profit made by washing machine factory	\$25m

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Asif also explained that: 'These changes across all factories will have a positive impact on the accounting ratio results of the whole company, which many stakeholders refer to. The Finance Director and I will work on other proposals to make the ratios for 2018 appear even more favourable.' Some of ADP's accounting ratios for 2017 are shown in Table 2.

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**Table 2: Selected accounting ratio results for ADP, as at 30 September 2017**

Gearing ratio	25%
Profit for the year margin (profit margin)	7.8%
Return on Capital Employed (ROCE)	6.2%
Current ratio	1.2
Dividend yield	4.3%

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**Factory Q – a case for closure?**

ADP has expanded through external growth over the last 20 years. It has acquired some factories that perform less satisfactorily than others. Factory Q is a good example. This factory produces small domestic refrigerators. As with all ADP's factories, it is operated as a profit centre. It has recorded an adverse profit variance for the last three years. Machinery and equipment in this factory was last updated in 2005. Some directors want to close the factory and outsource production. The Finance Director has prepared a variance analysis table for Factory Q for the last three months. See Appendix 1.

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**Market development – sell in the USA?**

ADP does not currently sell its products in the USA. The safety standards for electrical goods are higher, and consumer protection laws stricter, than in most of ADP's markets. Consumer expectations in the USA are for high quality products. The average size of domestic appliances is bigger than the rest of the world. However, the total size of the USA market is, according to Asif, the main reason why ADP should aim to launch its products there in 2018. The Marketing Director has the responsibility for preparing a marketing plan for the sale of ADP products in the USA. He suggested to Asif that: 'Long term sales forecasts will be the most important factor in our new marketing plan to break into the USA market.'

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**Country Z factory – improving employee performance**

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ADP is a multinational business that takes advantage of differences in wage rates and employment laws between the countries it operates in. For example, country Z is a low income developing country. It has few employment laws to protect workers. ADP benefits from this situation and pays its employees in its country Z factory less than 50% of the average ADP wage rate.

This ADP policy of treating employees in different countries in different ways was defended by the Human Resources Director at a press conference. She held this press conference after an accident in the country Z factory that badly injured four employees. 'It is true that this factory does not have the safety equipment that we install in our other factories around the world. However, ADP meets all its health and safety obligations under the law in country Z. Our employees here are paid more than other similar workers in the country. Unemployment is high so they know that other opportunities are limited.'

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The Operations manager of ADP's factory in country Z is aware that employee performance is a real problem for the company. See Table 3.

**Table 3: Employee performance and output data – ADP's country Z factory**

	2016	2017
Number of units produced annually	110 000	96 000
Number of units wasted due to serious faults	2 000	3 000
Number of employees (full-time equivalent)	250	240
Total days lost through absenteeism	2 500	2 600

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**Operational efficiency**

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ADP's international competitiveness is poor despite the company benefiting from purchasing economies and other economies of scale. Poor operational efficiency is caused by:

- Ineffective communication between ADP's factories and the Marketing department at Head Office. One result of this is inventory levels are higher than is normal for this industry.
- A poor relationship with many of its suppliers. They are expected to deliver parts and components to the quality control standards set by ADP. They have to pay a penalty charge for each faulty component and pay for all transport costs.
- Low involvement of employees in solving operations problems.

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**Strategic issue: product development**

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Asif asked the Operations Director to produce a report on two potential product development projects for ADP – option A and option B. The Board will be asked to consider both of these and recommend which project should be chosen. A summary of the report is shown in Appendix 2.

**Strategic issue: crisis management**

Three weeks ago the Customer Relations (CR) department of ADP started receiving feedback from consumers that a new model of hairdryer was overheating and causing bad burns. This model has proven to be popular due to celebrity endorsements – 200 000 units were sold in the first 3 months after launch. CR contacted the CEO immediately. However, the problem was only raised at yesterday's Board meeting. The directors discussed whether to give generous compensation to the consumers affected if they:

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- return faulty hairdryers to the factory and
- sign letters stating they would not report the problem to the media.

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Asif suggested: 'It could be an expensive mistake to publicly admit responsibility for any faulty products. By paying money to consumers with the over-heating hairdryer we will hopefully limit bad publicity as long as the media does not find out. The shareholders may not forgive us if we call back all units of this model and withdraw it from the market. How should we deal with this crisis to minimise the long term impact on ADP?'

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**Appendix 1: Factory Q – Budget and variance analysis for 3 months to 30 September 2017**

	Budget (\$m)	Actual (\$m)	Variance
Revenue	80	72	Adverse
Cost of sales	55	54	Favourable
Factory overhead costs	12	14	Adverse
Allocated Head Office overheads	5	6	Adverse
Profit	8	(2)	Adverse

**Appendix 2: Report on product development strategies**

	Option A	Option B
Summary	Develop washing machines that use 50% less water and energy than existing designs.	Develop very lightweight travel shavers and hairdryers.
Links to ADP's Core Competencies	These products will use existing very reliable washing machine motors that ADP produces and also supplies to other appliance manufacturers.	These products will use mini-battery technology patented by ADP. These are currently only used in the company's new range of lightweight electric floor cleaners. The batteries are more advanced than those of competitors.
Threat of substitutes	Several competing businesses are developing similar products but there have been long delays in launching them.	There are several established rival products which are well known by most consumers – but they do not use the ADP mini-battery technology.
Ease of entry to market	ADP appliances already well known. Other large manufacturing businesses are entering the electrical appliance market.	As well as further research and development costs, heavy promotional expenditure will be needed.
Power of suppliers	A competitor has patented a low energy pump that also filters recycled water. ADP may have to buy-in this component if there are delays in developing a similar pump within ADP.	ADP will need to purchase higher quantities of expensive raw materials used in the production of the mini-batteries. These materials are only available from one supplier.

### Section A

Answer **all** questions in this section.

- 1 Analyse the limitations to ADP of using budgets and variance analysis when deciding the future of factory Q. Refer to Appendix 1 in your answer. [10]
- 2 (a) Refer to Table 1 and the information about Asif's plan on lines 14–25. Calculate the forecast 2018 profit for the washing machine factory. [8]
 

(b) Assess the usefulness of accounting ratio analysis to ADP's senior management and **one** other stakeholder group. Refer to Table 2 in your answer. [10]
- 3 'Long term sales forecasts will be the most important factor in our new marketing plan to break into the USA market.' (Lines 58–59).  
Do you agree with this statement? Justify your answer. [16]
- 4 (a) Refer to Table 3. Calculate for 2017:
 

(i) labour productivity [3]

(ii) wastage rate. [3]

(b) Evaluate strategies for improving employee performance in ADP's country Z factory without increasing unit labour costs. [14]
- 5 Evaluate whether the introduction of lean production techniques would be enough to improve ADP's operational efficiency. [16]

### Section B

Answer **one** question from this section.

- 6 Evaluate whether Prahalad and Hamel's concept of Core Competencies and Porter's Five Forces model are likely to be effective frameworks for ADP's future business strategies. Refer to Appendix 2 in your answer. [20]
- 7 Discuss how ADP should strategically manage and plan for crises in ways that minimise their long term impact on the business. [20]



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