

**CERTIFIED PUBLIC ACCOUNTANT  
ADVANCED LEVEL 2 EXAMINATIONS  
A2.2: STRATEGIC PERFORMANCE MANAGEMENT  
FRIDAY: 01 DECEMBER 2017**

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**INSTRUCTIONS:**

1. **Time Allowed: 3 hours 45 minutes** (15 minutes reading and 3 hours 30 minutes writing).
2. This examination has Only one case study.
3. Show all your workings.
4. All iCPAR Examination rules and regulations apply.

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## CASE STUDY

### BACKGROUND

Grands Lacs Group (GLG) was incorporated in 1955 by three Rwandese working in diaspora with primary objective of investing back home for job creation and economic growth. GLG is a holding company listed on Rwanda stock market with three group members i.e. Grands Industries Limited (GIL), Grands Hospital Kivu (GHK) and Grands Airlines Limited (GAL). Its headquarters are located in central Kigali where major administrative work for all group members is carried out. The Human Resource, Research and Development, Information and Technology, Procurement and major finance functions are centrally run at group level. Managing directors (MDs) of the subsidiaries have full control over the business operational and revenue collection activities. GLG allocates costs to subsidiaries according to the services rendered in a given period. However the allocation officer sometimes overcharges subsidiaries, when MDs fail to give him appreciation cash allowances. Customers pay money directly to MDs' mobile money telephone lines to ease realization of periodical revenue collection targets.

GLG through its subsidiaries has invested in East, Central and West Africa together with the Middle East where it is even listed on most of the respective stock markets. This rapid growth has come due to shareholders' charisma for dynamic and innovative top managers who are committed to achieving the best. Turnover of top managers at GLG is averagely at high rate premised on managerial non-performance especially in years where there are no dividend payouts. The last chief executive officer (CEO) to resign was advised to voluntarily do so after discovering his influence in the recent staff recruitments and giving company laptop to his son to complete research report. GLG has a standardized budgeting and costing system which is operating on activity based costing concept. Variance analysis and ratio analysis are always performed at the end of the financial year to show shareholders the overall performance so as to either propose or not propose dividends. Return on capital employed, current ratio and debt to equity ratio are commonly used for evaluation of overall performance and appraisal of top management. Customer profitability analysis is used for customer retention by ranking customer segments according to the law of the vital few (80/20 rule). Target costing is also used to determine competitive product/service prices that are affordable to customers without compromising quality of products/services.

**Shareholders' views and resolutions**

GLG's shareholders want to adopt modern management approaches given the fast moving technological advancements and globalization. They consider reviewing GLG's strategy to develop and implement value-creating strategies that support creation of net worth to maximize their dividend payouts. This will be a rubber stamp to top management turnover which is affecting their attraction for skilled and innovative managers. Shareholders believe that re-aligning their objectives with the managerial performance measures will solve the problem of turnover.

**Top management's views and resolutions**

Board of directors (board) has proposed adoption of balanced scorecard (BSC) approach to manage performance in order to address shareholders' concerns. BSC has potential to re-align objectives with both economic and managerial performance of an organization. The board noted that measuring performance basing on turnover and profitability levels is very traditional and looks like operating in dark ages yet GLG is always referred to as company of third millennium. BSC coordinates all organizational activities and it should be adopted effective 01 January 2018. However the incumbent CEO who also doubles as the board secretary indicated that apart from coordinating all organizational activities, still BSC approach uses traditional performance measures which will create no difference from the current situation that is characterized by high management turnover. He proposed introduction of value based management (VBM) approach which is suitable at addressing shareholders' objective of maximizing dividend payouts. VBM stimulates better decision making at all levels in an organization because it provides useful information for quantification and comparison of alternative strategies for proper selection of value maximizing strategies. VBM recommends use of economic value added (EVA) and discounted cash flows (DCF) as the appropriate performance measures.

In a meeting held a fortnight ago, the board resolved to implement both approaches as the board chairman informed members that integration of BSC and VBM with ABC will benefit GLG more than implementing only one of them. It will be a five year project which is expected to help in measuring and tracking of performance. Board maintained 01 January 2018 as the commencement date for this robust project of setting up a modernized management approach.

The board chairman, in his conclusive remarks said that in five years' time, GLG will be doing business differently. GHK's request to use rolling budgeting approach on quarterly basis was also granted by the board during the previous meeting. The board further recommended use of learning curve theory and linear regression analysis during evaluation of strategic projects for financing. GLG's statement of financial position and statement of profit or loss and other incomes for the year ended 30 September, 2017 are attached as appendix 1.

The following are information extracts from each group member:

1. **Grands Industries Limited (GIL)**

GIL was established in 1977 under holding of GLG and is located in Kigali Industrial Zone with subsidiaries in the East African region as well as West and Central Africa. GIL manufactures world class cosmetics in categories of skin care, body and bath, men's line and color cosmetics. GIL's market share for skin care and body & bath products has been declining for the last three years but market survey results revealed that the decline is due to increasing demand for herbal cosmetic products despite huge investment in advertisement and promotional activities. Similarly the MD has decided to rebrand the affected products to include the herbal components effective 01 October 2018. This rebranding project is anticipated to cost Frw 1,178.4 million and GIL is required to internally generate these funds as per the group's policy. MD hopes that these funds would be raised within four quarters beginning from 01 October 2017, through reserving 40% of the quarterly net cash flows. GIL's quarterly output, sales, advertisement costs and total costs for the period beginning 01 October 2016 to 30 September 2017 is given below:

	<b>Cartons "000"</b>	<b>Frw "Million"</b>		
<b>Period</b>	<b>Output (X<sub>1</sub>)</b>	<b>Sales (Y<sub>1</sub>)</b>	<b>Advertisement cost (X<sub>2</sub>)</b>	<b>Total cost (Y<sub>2</sub>)</b>
<b>Quarter 1</b>	108	14,460	324	12,900
<b>Quarter 2</b>	100	13,500	300	12,300
<b>Quarter 3</b>	95	12,900	285	11,925
<b>Quarter 4</b>	82	11,340	246	10,950
<b>Total</b>	385	52,200	1,155	48,075

Management budgeted to sell extra 14,000 cartons and spend additional Frw 42 million on advertisement and promotional activities in the Quarter beginning 01 October 2017 in comparison to previous, Quarter 4 that ended 30 September 2017.

GIL recovers 80% of the sales in the current quarter and the balance in the following quarter. All fixed costs and 95% of variable costs are paid during the quarter whereas the balance is paid in the next quarter.

The market survey has further revealed counterfeits in color cosmetics products even though GIL had not yet recognized any related sales decline. The MD moved in very fast to control the situation by making substantial changes in the color cosmetics products designs in quarter 4. These changes directly increased labour hours taken to produce the color cosmetics products which decreased profits of quarter 4. After the changes workers took 20.85 hours to produce the first carton due to the learning curve effect and workers were paid Frw 2,400 per hour. Labour cost of Frw 144 million was incurred in production of 12,000 cartons of color cosmetics products during quarter 4. However GIL had planned to produce each carton of color cosmetic product within 18.75 hours at a standard cost of Frw 2,300 per hour. GIL acted against the group's policy and allowed idle time of 1% for workers to rest since it was a tense quarter.

2. **Grands Hospital Kivu (GHK)**

GHK located in Western province has become a one stop health facility for most Rwandese due to its specialized medical services offered in collaboration with Advanced Health Services Bureau (AHSB) based in Paris, France. GHK's MD who is a Bachelor of commerce graduate is happy for board's approval of his request to use a rolling budget approach. The Director General of AHSB who visited the hospital last quarter seconded the hospital's adoption of a rolling budget approach. GHK prepares its budgets on quarterly basis and the MD wishes to implement rolling budget approach immediately using the previous quarter performance of the in-patients section. GHK has 140 in-patient rooms and each room accommodates two patients at a daily charge of Frw 7,500 per patient. The hospital works 7 days a week (day and night) and serves both walk-in and

insurance inpatients. However the insurance companies negotiated for a 40% discount on daily room charges.

GHK charges a daily standard price of Frw 2,750 per inpatient to cater for treatment and supervision. However 65% of this charge helps the hospital to pay part of the other variable overheads. Normally GHK incurs daily variable cost of Frw 1,250 per inpatient and fixed costs of Frw 5.5 million per month. GHK incurs additional variable overheads of Frw 20,000 per day when occupancy rate exceeds 85%.

Below is the summary of inpatient section's budgets for last quarter for year ending 30 September 2017 and first quarter for the year ending 30 September 2018.

	<b>Quarter 4</b>	<b>Quarter 1</b>
<b>Income:</b>	<b>Frw "000"</b>	<b>Frw "000"</b>
Hospital admission charges	173,880	120,060
Treatment and supervision charges	<u>70,840</u>	<u>52,118</u>
	<u>244,720</u>	<u>172,178</u>
<b>Expenditure:</b>		
Variable costs	32,200	23,690
Other variable overheads	47,886	33,876.70
Fixed costs	<u>16,500</u>	<u>16,500</u>
	<u>96,586</u>	<u>74,067</u>
<b>Budget surplus</b>	<b><u>148,134</u></b>	<b><u>98,111.30</u></b>

The hospital had budgeted during last quarter that walk-in inpatients would occupy only 75% of the available rooms but the actual occupancy rate was 60%. This performance led to an increase of 40% in the number of insurance inpatients compared to what was budgeted for. The MD is certain that last quarter performance trend may not change for the next six months.

### 3. **Grands Airways Limited (GAL)**

GAL operates three Aeroplane landing stations in Kibuye, Kigali and Butare. Kibuye station located in Western province serves only domestic market with two classes of

services. The Business Class (BC) mostly for business people travelling for business purposes and the VIP class for government and public servants. GAL has realized a high growth in market share in the years 2016 and 2017 because of its affordable ticket charges and excellent customer care. GAL services flight routes, Kivu to Kigali and Kivu to Butare with two planes on each route. The growth in market share has not matched the profit earned as it was forecasted by the GAL's Demand Planner for the financial year ended 30 September 2017. The board is not happy with GAL's profit performance and has tasked the financial analyst to review the profitability per class, using the company's marginal costing technique, and give recommendations on the approach.

GAL's annual trading performance for the last quarter of year ended 30 September, 2017 was as below.

	<b>BC class</b>	<b>VIP Class</b>
	<b>Frw "000"</b>	<b>Frw "000"</b>
Sales	256,000	235,500
Direct overhead costs	177,800	159,900
Gross profit	78,200	76,000
Other service overheads	65,000	66,000
Net profit	13,200	10,000
Number of tickets sold	17,550	12,200

Fixed direct overhead costs are absorbed at a rate of Frw 4,500 per ticket for each class. Other service overheads include certain costs that vary with activity at a rate of 10% of sales value. The lucrative market growth of GAL's business has attracted several investors' attention who have evaluated the opportunity to open business in its current area of operation. The board of Modern Airline Services (MAS) in its recent meeting passed a proposal to acquire more four planes for the planned extension of business operations. GAL has not taken this lightly and is considering a review of its costs to be the most efficient airline service provider in the area allowing it to charge lower prices than other providers. The financial analyst has been tasked to review GAL's other service overhead costs and advise on the best cost cutting strategy.

The details of the other service overheads are as follows:

	<b>BC (Frw "000")</b>	<b>VIP (Frw "000")</b>
Insurance	19,500	15,000

Administration costs	25,500	27,500
Sales and marketing costs	20,000	23,500
	65,000	66,000

The Financial Analyst has suggested to GAL's MD to select from any of the following cost cutting options.

**Option 1**

Reduce the ticket price by 5%, renegotiate insurance by a discount of 3% and cut the sales and marketing costs by 15% since the company is already known and the only problem is service delivery. The ticket price is to be reduced by 1.2%.

**Option 2**

Quick Wins Limited (QWL), a third party logistics provider has offered to provide insurance, sales and marketing, telephone and after sales services at a discount of 10% and a fixed retainer of Frw 2 million per month per class. The ticket price is to be reduced by 1.5%.

**REQUIRED:**

- (a) Using linear regression analysis, advise the MD of GIL on the proportion of the rebranding project that will be completed using net cash flows of the quarter beginning 1 October, 2017. **(14 Marks)**
- (b) Evaluate the effect of rebranding color cosmetics products on GIL's performance basing on the following variances (consider learning curve effect):
  - (i) Labour rate variance **(3 Marks)**
  - (ii) Idle time variance **(2 Marks)**
  - (iii) Labour efficiency variance **(6 Marks)**
- (c) Appraise GLG's overall performance for the year ended 30 September 2017 using the following measures:
  - (i) Return on capital employed (ROCE) **(2 Marks)**
  - (ii) Current ratio **(2 Marks)**
  - (iii) Debt to equity ratio **(2 Marks)**
  - (iv) EVA **(4 Marks)**
- (d) Assess the implication of using rolling budget approach on the GHK inpatient section's budgeted surplus of the first quarter for the year ending 30 September, 2018.

- (Show all your workings) **(8 Marks)**
- (e) Advise the management of GAL on the following:
- (i) The service class that gives the highest contribution per ticket. **(5 Marks)**
  - (ii) The sales required from each service class to generate annual contribution of Frw 437 million when the current sales mix is maintained. **(5 Marks)**
  - (iii) Whether the MD should consider the cost cutting options suggested by the financial analyst. **(16 Marks)**
- (f) Write a report to GLG's board of directors:
- (i) Discussing the integration of VBM and BSC with the existing systems in a bid to solve the problem of top management turnover. **(15 Marks)**
  - (ii) Assessing the potential risks that are likely to be faced by GHK for changing a management information system. **(4 Marks)**
  - (iii) Advising on the role of rolling budgeting approach to the achievement of GHK's strategic objectives. **(4 Marks)**
  - (iv) Discussing the distinction between the two categories of forecasting methods. **(6 Marks)**
  - (v) Presenting any **two** ethical issues identified from the case that may potentially affect GLG. **(2 Marks)**
- (Total 100 Marks)**
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**End of question paper**