

November 2024 and February 2025  
Operational Case Study  
2019 CGMA Professional Qualification  
Full post exam support materials

Below are the full post-exam supporting materials for the Operational Case Study Exam. Use the links on this page to jump to the documents required.

#### Pre-seen material

November 2024 and February 2025 Operational Case Study [pre-seen](#).

#### Examiner's report

The November 2024 and February 2025 [examiner's report](#).

#### Exam variants

- [Variant 1](#)
- [Variant 2](#)
- [Variant 3](#)
- [Variant 4](#)
- [Variant 5](#)
- [Variant 6](#)

#### Suggested solutions

- [Suggested solutions for variant 1](#)
- [Suggested solutions for variant 2](#)
- [Suggested solutions for variant 3](#)
- [Suggested solutions for variant 4](#)
- [Suggested solutions for variant 5](#)
- [Suggested solutions for variant 6](#)

#### Marking Guidance

- [Marking guidance for variant 1](#)
- [Marking guidance for variant 2](#)
- [Marking guidance for variant 3](#)
- [Marking guidance for variant 4](#)
- [Marking guidance for variant 5](#)
- [Marking guidance for variant 6](#)

If you need any further information please [contact us](#).

# Operational Case Study Examination

November 2024 - February 2025

Pre-seen material

## BackOffice



### **Context Statement**

*We are aware that there has been, and remains, a significant amount of change globally. To assist with clarity and fairness, we do not expect students to factor these changes in when responding to, or preparing for, case studies. This pre-seen, and its associated exams (while aiming to reflect real life), are set in a context where current and ongoing global issues have not had an impact.*

*Remember, marks in the exam will be awarded for valid arguments that are relevant to the question asked. Answers that make relevant references to current affairs will, of course, be marked on their merits.*

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## Your role

You are a Finance Officer working within the Finance Department of BackOffice. You are principally involved in the preparation of management accounting information and providing information to managers to assist with planning and decision making. At times, you are also expected to assist with the preparation of the financial statements and answer queries regarding financial reporting and other financial matters.

## Company background

BackOffice is a company that designs, manufactures and markets backpacks that serve as an alternative to the traditional briefcase. BackOffice backpacks are built to a high specification and aimed at the growing market of hybrid workers. Hybrid workers are people who work from both home and office; workers who need a portable container that can hold all the equipment they require to do their job. BackOffice is a high-value brand, and this is reflected in the relatively high-selling prices compared to other backpack brands. Currently, BackOffice sells its products through the BackOffice website and selected retail stores. The company is based in Hland, a country in Western Europe which has the H\$ as its currency.

BackOffice was founded in 2015 by Arlo James. Arlo, a product designer by trade, was previously employed as chief designer for a leading hiking backpack brand. While working for this company, he became expert in ergonomic backpack design, technical textiles and the backpack manufacturing process. This expertise and other skills were seamlessly transferred to his BackOffice start-up company when Arlo realised that there was a gap in the business market for a backpack that incorporated style, good interior functionality and comfort while being worn.

Hland is a country with a hugely influential fashion industry and a long history of textile manufacturing. Half a century earlier, Hland had a thriving textile industry that included the production of yarn, the knitting and weaving of fabric, dyeing factories and many thousands of industrial machines for making-up the fabric produced into garments, home furnishings and outdoor products. This industry has been in decline for years as competition from other countries undercut prices. When Arlo founded BackOffice, he decided that his company would have an in-house manufacturing facility in Hland. This was an unusual and risky decision as almost all backpack companies either outsource the manufacturing to specialist companies in Asia or base their own production facilities there, as labour costs are much lower than in Europe or America. The decision to manufacture the BackOffice backpack in Hland has proved to be a significant part of the success of the BackOffice brand as the backpacks, designed to be beautiful as well as functional, are strongly linked to the centre of the world's fashion industry.

The BackOffice brand launch was managed by an external marketing company and was phenomenally successful. The marketing company sent samples of all BackOffice's products to major fashion houses and magazines as well as business magazines and reviewers. A leading global fashion magazine featured all the BackOffice products in an article showing a designer's office wear autumn collection. Demand for BackOffice products was stimulated by this article, but the brand really took off when an A-list actor, also famous as a goodwill ambassador for humanitarian aid agencies, was photographed using a BackOffice backpack on numerous occasions. In an interview focused on how the actor balanced her life as parent, actor and ambassador, she stated that she relied on her supportive spouse, her RADA training and her BackOffice backpack.

BackOffice has experienced sales growth every year since launch. The concept of the hybrid worker increased in popularity throughout the late 20<sup>th</sup> and early 21<sup>st</sup> century, largely due to advances in technology. The growth rate of this market has continued to accelerate. Working from home for several days each month, while hot desking at the office for the remainder of the time, has become the norm for most office-based companies. As a result of this, hybrid workers value a

backpack capable of organising laptops, tablets, work files, chargers and stationery, while being easy to load and transport. The design of the BackOffice backpacks means that they are more comfortable to carry for prolonged periods of time than any other business backpack on the market. This is perfect for commuters with journeys using public transport or those with a long distance to walk.

Since the founding of the company, Arlo James has recruited a highly-competent team of senior managers. The Senior Management Team (SMT) meet frequently and work collaboratively and effectively. The current SMT format has existed since 2017. In the year to 30 June 2024, the company's revenue was H\$16.1 million, gross profit was H\$7.9 million and profit before tax was H\$2.1 million. During this year, the company sold just over 100,000 backpacks.

## BackOffice's ethos

- BackOffice's mission statement is "To produce the most beautiful, the most useful, the most durable and the most comfortable office backpack". This mission guides the design and production of all BackOffice products.
- Arlo James and the other members of the SMT at BackOffice are committed to sustainability. The durability of the designs means that the backpacks can last for many years. The materials used in production are always ethically sourced, and recycled materials are used whenever this will not compromise the durability or functionality of the backpacks. The company has an aim to be carbon neutral by 2030 and is continually striving to improve its supply chain, manufacturing processes and outward logistics to get closer to this. The power source at the BackOffice offices and production facility is largely supplied by solar panels and all company vehicles are electric.

## The market for backpacks

### The global market for backpacks

The global market for all backpacks in 2023 was worth H\$17.2 billion and is expected to grow to H\$31.38 billion by 2030, exhibiting a compound annual growth rate (CAGR) of around 9%. Currently, the largest market is North America (H\$5.71 billion), followed by Europe and then Asia Pacific.

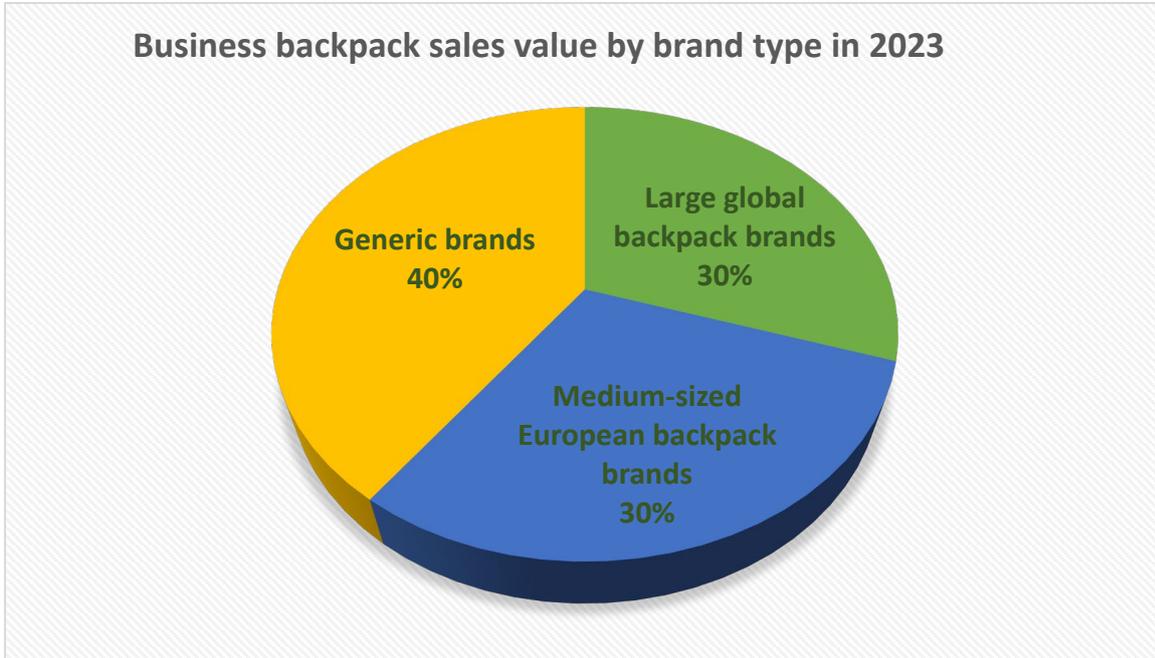
The global market for backpacks can be broken into three main segments:



'Other' includes business backpacks, which is where BackOffice is positioned.

## The European market for business backpacks

The European market for business backpacks (which is principally where BackOffice sells) is worth H\$650 million in sales revenue. This market can be broken down as follows:



The different brand types can be characterised as follows:

<b>Large global backpack brands</b>	There are three large backpack brand companies that operate globally. These three companies operate in all segments of the market (travel, hiking/camping and other), and account for around 30% of total sales value in the European market for business backpacks. Two of these brands are considered premium and the other mid-range.
<b>Medium-sized European backpack brands</b>	There are 10 medium-sized backpack brand companies that are based in Europe which make and sell business backpacks. For most of the companies, sales are focussed in Europe. BackOffice is classed as one of these companies at the premium end of the market.
<b>Generic brands</b>	There are over 20 generic brands that sell products ranging from clothing and tents to food (in the case of supermarkets). The backpacks sold by generic brands tends to be at the economy end of the market, with backpacks usually mass produced in Asia.

## Extracts from the BackOffice website



Home

Products

Our Story

Our Ethos



# BackOffice

*Elevate your style and productivity*

Welcome to our exclusive collection of premium office backpacks and everyday carrier (EDC) backpacks. Crafted with the utmost attention to detail, our backpacks combine sleek aesthetics with unrivalled functionality and comfort. Each backpack is engineered to meet the demands of the modern business executive, ensuring that you have everything you need within easy reach.

Explore our collections today and discover the epitome of functionality and style in office and EDC backpacks.

## Design and build quality

Design is crucial to the BackOffice brand. All our office and EDC backpacks are initially created using computer aided design technology (CAD). The designs then evolve through a number of prototype iterations before undergoing rigorous laboratory and human testing. The development of a new backpack takes approximately 10 months before it is passed for production.

All our Office and EDC backpacks incorporate ergonomic adjustable backpack straps and a patented back panel airflow system for maximum comfort. All backpack exteriors are manufactured from the finest ballistic nylon, ensuring strength, a smooth finish and water resistance, while adding minimal weight. In addition, we only use TJJ zippers on all our external openings and pockets.

All our products are manufactured in Hland, the heart of the fashion world. Our workers have inherited their meticulous craftsmanship from generations of textile and leather workers. Our suppliers are all experts, and local, having learned over decades what their customers need.

# Our products

## Office backpacks

Our office backpacks are meticulously engineered and designed for the dedicated professional who refuses to compromise on their workspace, even when on the move. Our backpacks are your portable office, providing the ultimate solution for those who require their place of business to be with them at all times.

These backpacks allow you to carry your laptop, tablet and all your essential work tools securely and conveniently. Our intelligently-designed compartments and pockets offer optimal organisation, allowing you to effortlessly access your devices and accessories whenever you need them.

In addition to the beautiful design, our office backpacks boast high technical functionality that sets them apart from other brands. From advanced charging capabilities to integrated power banks, you can conveniently charge your devices on the go and stay connected. Innovative features like radio frequency identification (RFID)-blocking pockets and anti-theft systems mean your valuable data and belongings are always protected (click [here](#) to view our office backpack).

## EDC backpacks

Our EDC backpacks are designed to be used in a variety of contexts that seamlessly switch from work to leisure. Every EDC backpack exudes elegance and makes a bold fashion statement, while providing practical and comfortable carrying performance. You will find ample space to stow and organise your everyday essentials from your laptop to a change of clothing for a mini break. Whether you are navigating the urban jungle or embarking on a recreational outdoor adventure, our EDCs effortlessly blend into almost any setting (click [here](#) to view our EDC backpacks).

# Office backpack ranges

There are three designs in our Office range.

## Uffico

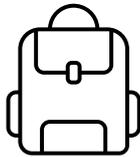
### Our premium Office backpack key specification



- 2 integrated USB ports - easy connection
- RFID pocket
- Easy loop cable management system
- 2 internal bottle holders with PVC lining
- Laptop screen size: 17.3"
- Dimensions: 46 x 32 x 20 cm

## Capsula

### Our mid-sized Office backpack key specification



- 2 integrated USB ports - easy connection
- RFID pocket
- Cable management system
- 1 internal and 1 stretch mesh bottle holder
- Laptop screen size: 15.6"
- Dimensions: 43 x 30 x 18 cm

## Scrivania

### Our compact Office backpack key specification

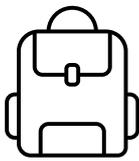


- Integrated USB port - easy connection
- RFID pocket
- Cable management system
- 2 stretch mesh bottle holders
- Laptop screen size: 14.1"
- Dimensions: 41 x 29 x 14 cm

## Everyday carrier (EDC) backpacks

Our EDC backpacks are currently available in a single design in two sizes. Both sizes have clam shell opening so that all contents are as visible and accessible as possible. Both sizes are also expandable so you can enjoy using these beautiful backpacks for a myriad of events and occasions.

### Our EDC backpack key specification



- Powerbank organisation
- 1 internal and 1 stretch bottle holder
- Laptop screen size: 17.3" (large) and 15.6" (small)
- Dimensions large: 46 x 35 x 22 cm  
-expanded: 46 x 35 x 26 cm
- Dimensions small: 43 x 30 x 19 cm  
-expanded: 43 x 30 x 22 cm
- Internal organisation pockets
- Luggage straps
- Key fobs
- Internal wallet with RFID protection

All BackOffice backpacks are available in a range of exterior shades with contrasting internal colours.

## Personalised backpacks

All BackOffice backpacks can be personalised with up to three gold initials free of charge.

## Senior Management Team (SMT)



**Managing Director: Arlo James** Arlo worked in various businesses as a product design engineer. He worked for 7 years as Chief Designer for a hiking backpack company before founding BackOffice.



**Finance Director: Hilary Sec** Admitted as an FCMA 5 years ago, Hilary has a wealth of experience in a diverse range of organisations. Hilary works closely with Arlo and is instrumental in helping to drive the business forward.



**Sales & Marketing Director: Gem Rossi** Gem joined Arlo as soon as BackOffice was formed. It was her vision of the BackOffice backpacks as a fashion as well as practical office tool that triggered the hire of the original marketing company.



**Production Director: Jack Loren** Promoted to Director in 2017, Jack has managed the growth of the manufacturing operations successfully. Jack currently works most closely with Ben Conti.



**Research & Development Director: Ben Conti** Ben was an ex-colleague of Arlo's from the hiking backpack company where they both worked. Ben's expertise with IT systems and digital design is a critical success factor for the business.



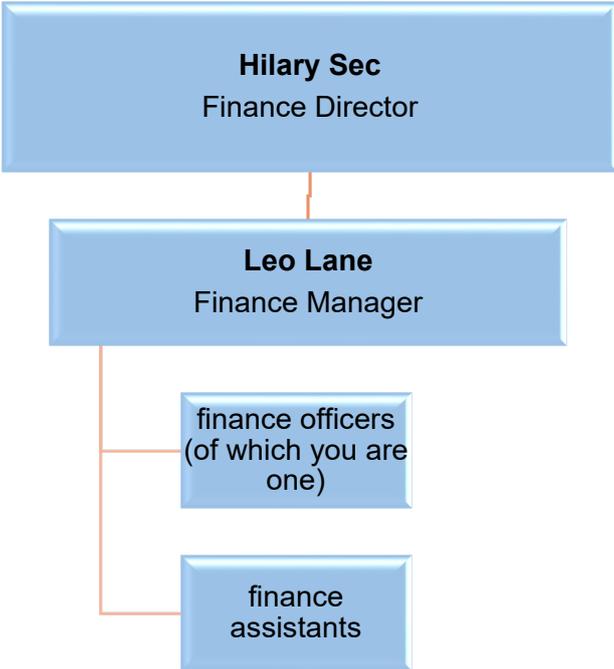
**Human Resource Director: Zed Abuto** Zed was recruited in late 2017, when it was obvious that growth in both volume and diversity of personnel roles needed careful strategic management.



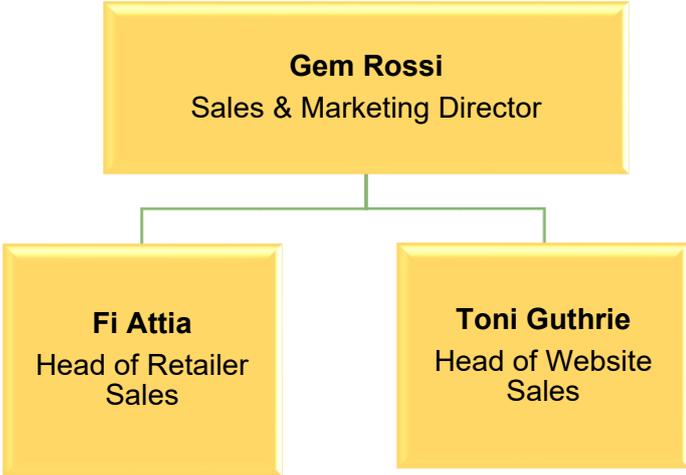
**Distribution Director: Char Grecco** Char spent 15 years working for a global logistics company before joining BackOffice at director level. They are expert in all manner of systems needed to ensure the coordination of efforts to deliver customer expectations.

# Key management teams

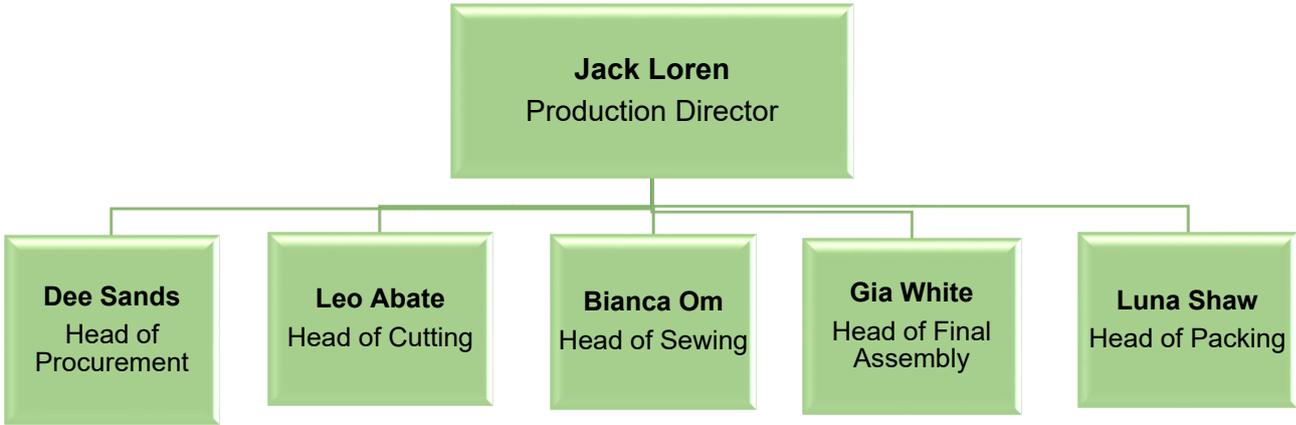
## Finance



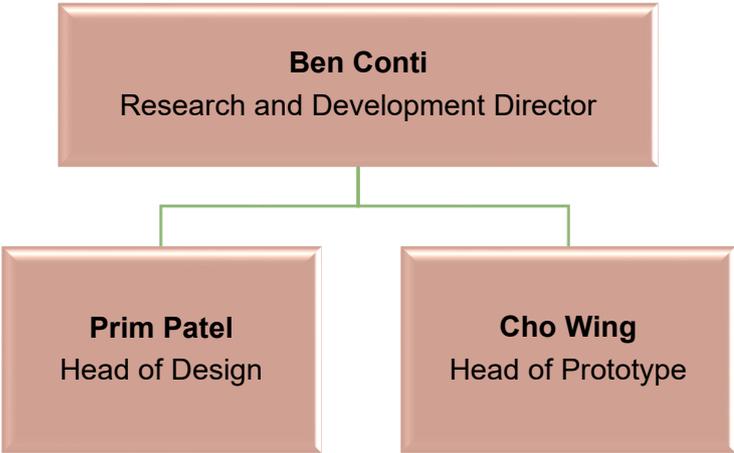
## Sales & Marketing



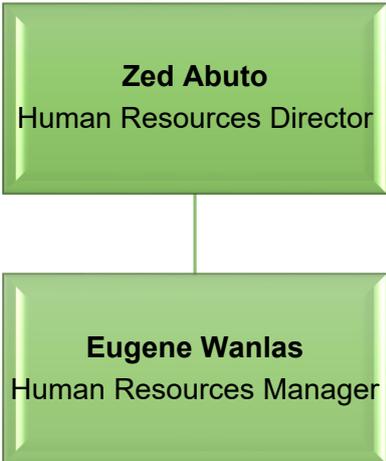
### Production



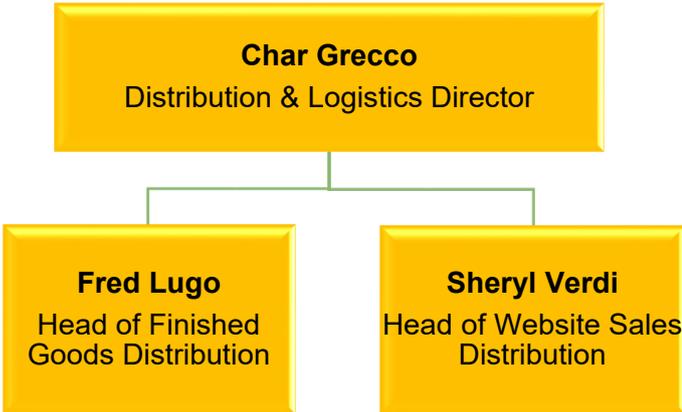
### Research & Development



### Human Resources



### Distribution



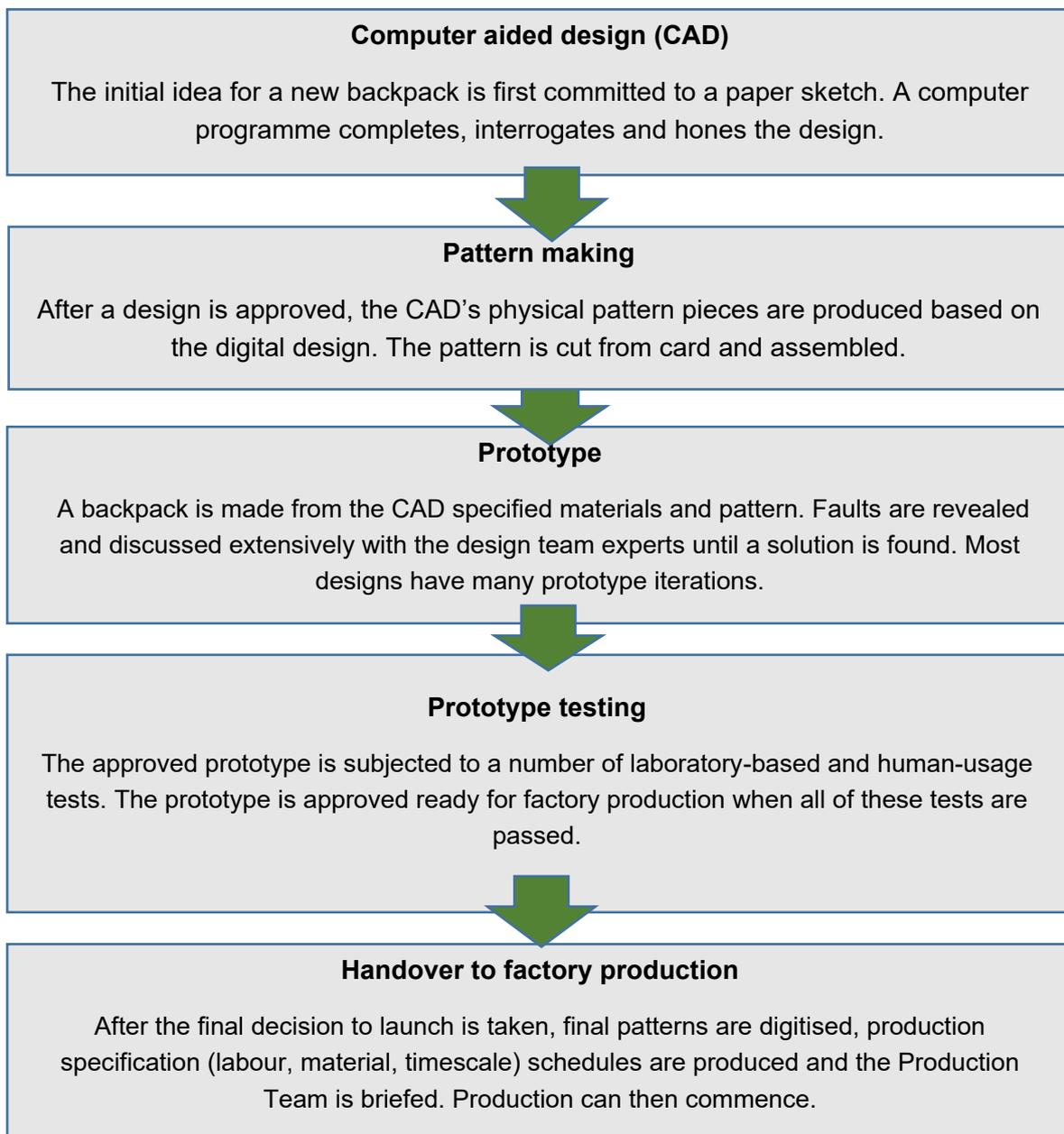
## Extract from the employee induction manual: Overview of the design and manufacturing process

### Introduction

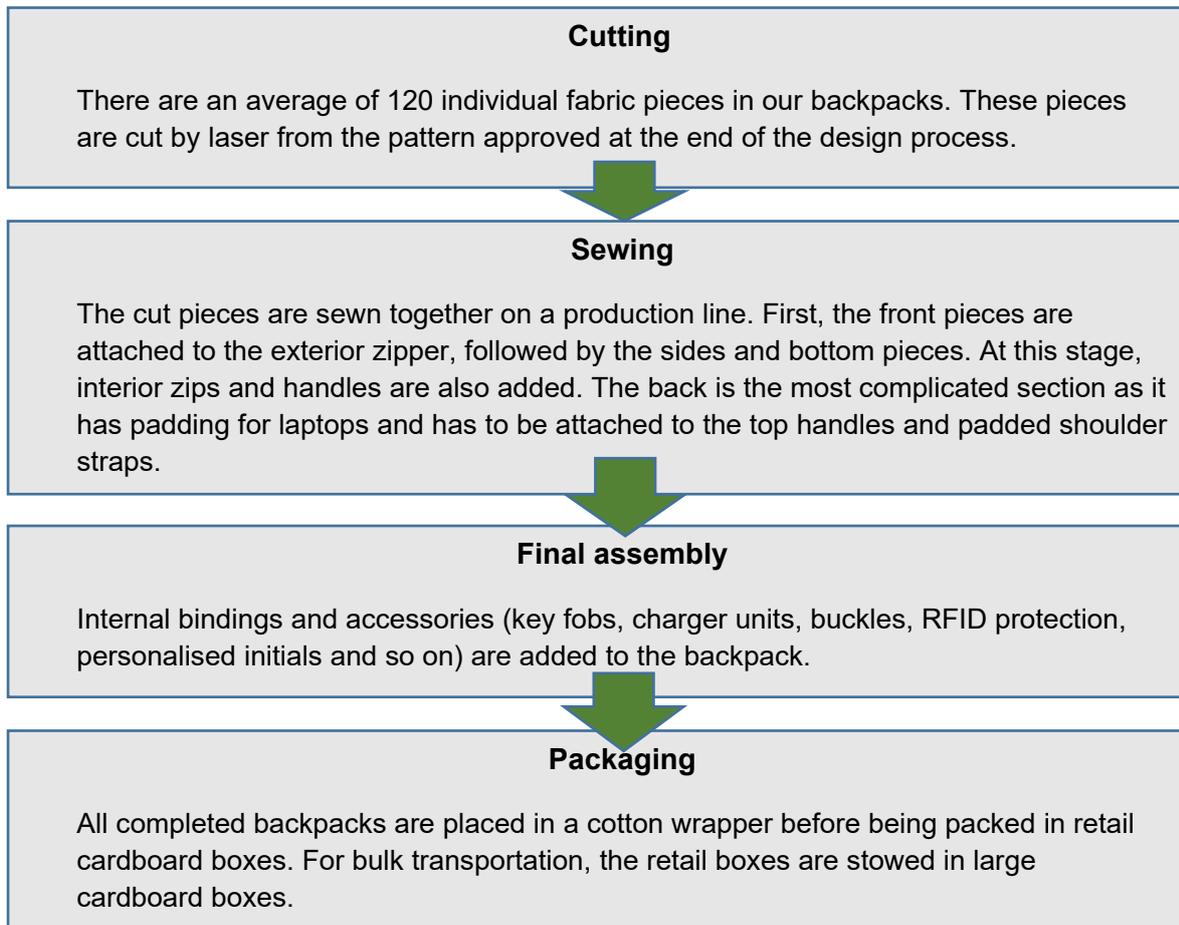
We design and manufacture all BackOffice backpacks from our premises here in Hland. Regardless of your role in our company, it is important that you appreciate the process from idea to finished product.

### The design and development process

This process can take anywhere between 6 months to a year and is as follows:



## The manufacturing process



**Note:**

The production schedule determines in advance which type of backpack is being manufactured. Each type of backpack is manufactured in batches. Each batch requires careful coordination of materials, patterns and machine calibration.

## Other information about company operations

### Production Facility

All BackOffice products are manufactured in Hland from its Production Facility. This is in contrast to almost every other backpack brand which manufactures in Asia, where the cost of production is relatively low compared to Hland. The SMT has stated that both control of the process and quality would suffer if production were relocated and that this will not happen. In short, the location of the Production Facility in Hland is integral to the brand. Furthermore, there is capacity at the facility for further expansion which the SMT intend to utilise soon.

### Purchasing and suppliers

The raw material inputs to the production process are:

<b>Ballistic nylon</b>	This material was originally developed for military use. As the name suggests, this nylon is extremely tough (it was designed to protect personnel from flying debris caused by artillery shells). BackOffice use the lightest and highest grade 1680 denier version of this material, which has a water resistant, smooth and fine finish with an exceptionally high tear strength value of 460 Newtons (most backpacks are made from polyester with a tear strength lower than 130 Newtons). The ballistic nylon used by BackOffice is sourced from a single supplier that offers 30-day payment terms and BackOffice usually holds 2 months' inventory.
<b>Cotton fleece</b>	Used to protect items like tablets, laptops and sunglasses from scratches, this fabric is available from a number of local suppliers as well as from suppliers further afield.
<b>Zippers</b>	There is one global supplier (TJJ) that specialises in backpack zippers. TJJ manufactures a zipper so superior to others on the market that almost all quality backpack manufacturers use them. TJJ zippers last for decades without breaking. They are self-lubricating and external zippers have a seal to prevent water ingress. BackOffice always designs backpacks with plated TJJ zippers.
<b>Foam padding, thread, buckles and accessories</b>	These items are sourced from a variety of companies selected based on the requirement that their products must meet the exacting quality specification from the BackOffice Design Department.
<b>Packaging</b>	All cotton wrappers and retail boxes are customised to include BackOffice's logo. These products are an important part of the brand identity and care is taken to ensure that the quality is right. The more general packaging and stationery are sourced based on low price.

**Note:** Credit payment periods from suppliers range from 30 days to 75 days.

## **Sales markets and sales channels**

### **The target market**

At its launch in 2015, Arlo James believed that the market segment that would want to own and use a BackOffice product was the hybrid worker. He believed that the superior functionality, durability and beautiful styling of BackOffice backpacks would command higher-than-average selling prices which narrowed this segment further. In the 9 years since the launch, Arlo has been proved right, as BackOffice has become a powerful brand name, strongly associated with the discerning and fashion-conscious client.

### **Sales channels**

BackOffice currently sells its products via selected retail outlets such as department stores and specialist bag stores as well as through the company's own website. Retailers account for approximately 60% of BackOffice's revenue and the website accounts for approximately 40% of revenue.

The website provides visitors with an extensive amount of information about the company founder and background, materials used, ethos and interactive examination of all backpacks in the five ranges. Details on how to choose the right backpack, the correct backpack size and the choice of colour and personalisation helps visitors to select the perfect BackOffice backpack for their needs.

Currently, 70% of BackOffice's sales are to customers in Hland, either through the website or from retailers. 25% of sales are to other countries in Europe, again, through the website and retailers. The remaining 5% are sales in Asia, which are all through retailers.

## **Distribution Centre and logistics**

The company has a state-of-the-art Distribution Centre close to the Production Facility, from where sales are shipped to both retail and website customers. BackOffice uses a global logistics company to deliver all of its products.

## **Research and Development**

Over the past 2 years, developing new product ranges has been a priority for BackOffice. Unfortunately, the last product launched was a complete failure and was withdrawn from sale almost immediately. The failed product was a backpack designed to organise and carry baby kit so that parents with babies could have all the essentials to hand while out of the home. It was believed that the brand would appeal to wealthier, brand-conscious parents, but it did not manage to compete with the better-known baby brands. Feedback from the market research company that investigated the failure concluded that the product would have diluted the brand and that BackOffice would have avoided most of the development and design costs had market research been conducted earlier in the development process. The Senior Management Team was shocked by this failure and are determined that it will not be repeated.

Products currently in development are:

- A range of backpacks made from recycled water bottles. The bottles will be collected, cleaned and transformed into polyethylene terephthalate (PET), a polyester fabric manufactured by a third party. This material was chosen early on in the development process as market research revealed that it appealed to potential customers as it is “green”, durable and has a luxurious feel.
- Backpacks for people who cycle to work. This product will maintain the wearer’s low centre of gravity while cycling, have additional padding for laptop protection and be waterproof.
- Modis. A range of removable packs (Modis Packs) designed to fit into a modified EDC backpack (Modis EDC). The Modis EDC will be based on the traditional EDC design but without the traditional internal compartments and will be sold separately to the packs. Different Modis Pack designs will be available, each serving a different purpose, meaning that the user can easily adapt a single Modis EDC to suit different occasions.
- A cabin bag made from ballistic nylon designed to meet exacting airline cabin size requirements. This is a departure from the backpack but seen as a complementary product.

## Employees

BackOffice had the following number of employees on 30 June 2024:

	<b>Number</b>
Development and production	172
Distribution	31
Head office	24
<b>Total</b>	<b>227</b>

## Standard costing and budgets

The company operates a standard absorption costing system using departmental overhead absorption rates based on direct labour hours. Standard cost cards are updated annually. Budgets are prepared annually on an incremental basis.

## Financial statements for the year ended 30 June 2024

### BackOffice

#### Statement of profit or loss for the year ended 30 June 2024

	2024 H\$000	2023 H\$000
Revenue	16,110	14,620
Cost of sales	(8,186)	(7,668)
<b>Gross profit</b>	<b>7,924</b>	<b>6,952</b>
Selling, distribution and marketing costs	(3,741)	(3,369)
Administrative expenses	(1,450)	(1,327)
<b>Operating profit</b>	<b>2,733</b>	<b>2,256</b>
Finance costs	(595)	(536)
<b>Profit before tax</b>	<b>2,138</b>	<b>1,720</b>
Income tax expense	(562)	(442)
<b>Profit for the year</b>	<b>1,576</b>	<b>1,278</b>

**BackOffice**  
**Statement of financial position at 30 June 2024**

	2024 H\$000	2024 H\$000	2023 H\$000	2023 H\$000
<b>ASSETS</b>				
<b>Non-current assets</b>				
Property, plant and equipment	11,957		12,560	
Right-of-use assets	1,956		1,450	
		13,913		14,010
<b>Current assets</b>				
Inventory	1,790		1,665	
Trade receivables	1,530		1,410	
Prepayments and other receivables	290		256	
Cash and cash equivalents	314		-	
		3,924		3,331
<b>Total assets</b>		<b>17,837</b>		<b>17,341</b>
<b>EQUITY AND LIABILITIES</b>				
Issued H\$1 equity share capital	1,000		1,000	
Retained earnings	4,861		4,285	
<b>Total equity</b>		5,861		5,285
<b>Non-current liabilities</b>				
Borrowings	8,500		8,500	
Lease liability	1,055		1,004	
		9,555		9,504
<b>Current liabilities</b>				
Overdraft	-		345	
Trade payables	1,312		1,219	
Accruals and other payables	280		307	
Tax liability	562		442	
Lease liability	267		239	
		2,421		2,552
<b>Total equity and liabilities</b>		<b>17,837</b>		<b>17,341</b>

**BackOffice****Statement of cash flows for the year ended 30 June 2024**

	2024 H\$000	2024 H\$000
<b>Cash flows from operating activities</b>		
Profit before tax		2,138
<b>Adjustments</b>		
Depreciation for property, plant and equipment	726	
Depreciation on right-of-use asset	423	
Finance costs	595	
		1,744
<b>Movements in working capital</b>		
Increase in inventory	(125)	
Increase in trade and other receivables	(154)	
Increase in trade and other payables	66	
		(213)
<b>Cash generated from operations</b>		<b>3,669</b>
Tax paid		(442)
Interest paid		(595)
<b>Net cash inflow from operating activities</b>		<b>2,632</b>
<b>Cash flows from investing activities</b>		
Purchase of property, plant and equipment	(123)	
<b>Net cash outflow from investing activities</b>		(123)
<b>Cash flows from financing activities</b>		
Repayment of lease principal	(850)	
Dividend paid	(1,000)	
<b>Net cash outflow from financing activities</b>		(1,850)
<b>Net increase in cash and cash equivalents</b>		<b>659</b>
Cash and cash equivalents at the start of the year		(345)
<b>Cash and cash equivalents at the end of the year</b>		<b>314</b>

## Budget information for the year ending 30 June 2025

### Total budgeted gross profit

	Office backpacks H\$000	EDC backpacks H\$000	Total H\$000
Sales revenue	12,696	5,330	18,026
Cost of sales	(5,873)	(2,994)	(8,867)
<b>Gross profit</b>	<b>6,823</b>	<b>2,336</b>	<b>9,159</b>
Gross profit margin	53.7%	43.8%	50.8%

### Office backpacks

#### Sales revenue

	Uffico	Capsula	Scrivania	Total
<b>Sales volumes:</b>				
Website	3,680	11,240	13,840	28,760
Retailers	5,520	16,860	20,760	43,140
<b>Total</b>	<b>9,200</b>	<b>28,100</b>	<b>34,600</b>	<b>71,900</b>
<b>Average sales prices:</b>	<b>H\$</b>	<b>H\$</b>	<b>H\$</b>	
Website	250	210	180	
Retailers	200	168	144	
<b>Sales revenue:</b>	<b>H\$000</b>	<b>H\$000</b>	<b>H\$000</b>	<b>H\$000</b>
Website	920	2,360	2,491	5,771
Retailers	1,104	2,832	2,989	6,925
<b>Total sales revenue</b>	<b>2,024</b>	<b>5,192</b>	<b>5,480</b>	<b>12,696</b>

#### Cost of sales

	Uffico	Capsula	Scrivania	Total
Total sales volumes	9,200	28,100	34,600	71,900
<b>Average production cost per unit:</b>	<b>H\$</b>	<b>H\$</b>	<b>H\$</b>	
Raw materials	27.72	25.82	23.22	
Direct labour	48.00	45.80	43.60	
Variable production overhead	3.08	3.00	2.91	
Fixed production overhead	9.26	8.99	8.72	
<b>Total cost per unit</b>	<b>88.06</b>	<b>83.61</b>	<b>78.45</b>	
	<b>H\$000</b>	<b>H\$000</b>	<b>H\$000</b>	<b>H\$000</b>
<b>Total cost of sales</b>	<b>810</b>	<b>2,349</b>	<b>2,714</b>	<b>5,873</b>

## EDC backpacks

### Sales revenue

	Small	Large	Total
<b>Sales volumes:</b>			
Website	5,880	8,560	14,440
Retailers	8,820	12,840	21,660
<b>Total</b>	<b>14,700</b>	<b>21,400</b>	<b>36,100</b>
<b>Average sales prices:</b>	<b>H\$</b>	<b>H\$</b>	
Website	150.00	180.00	
Retailers	120.00	144.00	
<b>Sales revenue:</b>	<b>H\$000</b>	<b>H\$000</b>	<b>H\$000</b>
Website	882	1,541	2,423
Retailers	1,058	1,849	2,907
<b>Total sales revenue</b>	<b>1,940</b>	<b>3,390</b>	<b>5,330</b>

### Cost of sales

	Small	Large	Total
Total sales volumes	14,700	21,400	36,100
<b>Average production cost per unit:</b>	<b>H\$</b>	<b>H\$</b>	
Raw materials	21.85	26.58	
Direct labour	43.60	48.00	
Variable production overhead	2.91	3.09	
Fixed production overhead	8.72	9.27	
<b>Total cost per unit</b>	<b>77.08</b>	<b>86.94</b>	
	<b>H\$000</b>	<b>H\$000</b>	<b>H\$000</b>
<b>Total cost of sales</b>	<b>1,133</b>	<b>1,861</b>	<b>2,994</b>

## Example standard cost cards

<b>Office backpack Uffico</b>				
	Quantity / hours	Standard price / rate H\$	Standard cost H\$	Standard cost H\$
<b>Materials:</b>				
Ballistic nylon	1.2 sq. metres	12.00	14.40	
Fleece	0.4 kg	2.30	0.92	
Other			11.20	
Packaging			1.20	
<b>Total</b>				<b>27.72</b>
<b>Direct labour:</b>				
Cutting	0.50 hours	18.00	9.00	
Sewing	1.20 hours	22.00	26.40	
Assembly	0.50 hours	18.00	9.00	
Packaging	0.20 hours	18.00	3.60	
<b>Total</b>				<b>48.00</b>
<b>Variable production overheads:</b>				
Cutting	0.50 hours	2.42	1.21	
Sewing	1.20 hours	0.92	1.10	
Assembly	0.50 hours	0.97	0.49	
Packaging	0.20 hours	1.42	0.28	
<b>Total</b>				<b>3.08</b>
<b>Fixed production overheads:</b>				
Cutting	0.50 hours	7.26	3.63	
Sewing	1.20 hours	2.77	3.32	
Assembly	0.50 hours	2.92	1.46	
Packaging	0.20 hours	4.27	0.85	
<b>Total</b>				<b>9.26</b>
<b>Total production cost</b>				<b>88.06</b>

## Notes on standards and budget preparation

- Standards are reviewed and updated annually.
- Normal raw material losses are included in the standard cost of each product.
- All direct labour overtime premium is treated as variable production overhead. Idle time is not budgeted for.
- Production overheads are allocated and apportioned to production cost centres and absorbed on a direct labour hour basis.

## Extracts from Senior Management Team meeting minutes

**Date:** 2 November 2024

**Present:** Arlo James, Hilary Sec, Gem Rossi, Jack Loren, Ben Conti, Zed Abuto

**Agenda point 2:** Products in development

Arlo James opened the discussion by stating that BackOffice currently has four new products nearing the end of development, all of which have incurred considerable investment to date. He is concerned that, following the disaster that was the baby kit backpack, BackOffice cannot afford to launch another unsuccessful product. He is aware that the Research & Development Department feels over stretched and demoralised and that it has been involved in too many new developments during 2024. He is also very concerned that the resources needed to launch four new products in the next year will put a considerable strain on personnel and cashflow.

Ben Conti and Gem Rossi then reviewed the progress of the four products in development:

### **Polyethylene terephthalate (PET) backpacks/Salvare range**

- All development is complete and handover to manufacturing scheduled for January, ready for an April launch. Extensive market research and testing indicate that the product will be very well received.
- PET polyester is much cheaper than ballistic nylon as it is made from used water bottles that would otherwise be destined for landfill. However, the choice of PET polyester is key to the success and integrity of the product range and the decision will not be based on the lowest price. Although a multiple supplier policy would be cheaper, BackOffice is looking for a single supply partner with whom it can build a collaborative relationship. This will ensure an uninterrupted quality supply of PET polyester and create bonds with an expert company that will help develop future products. Various suppliers of PET polyester have been rejected because they do not have good enough "green" credentials or are located too far away. Lower-priced suppliers have been rejected because their polyester has too low a tensile strength, too low a tear strength or does not dye well enough. Two suppliers have been shortlisted and the Senior Management Team is waiting for additional information before making the final decision.
- Dee Sands, Head of Procurement, will personally manage the relationship with the new PET polyester supplier for the first few months. This will ensure that any early problems are resolved without disruption to BackOffice operations or brand.

### **Modis**

- Development is expected to be complete by the end of January deadline as the prototype is about to be approved. The launch date is not yet set.
- Modis EDCs are the same as the traditional EDC except that they do not have a finished fixed inner compartment. In effect, they are outer shells with fixing devices to secure the internal Modis Packs.
- Three versions of the internal Modis Packs (Office, Travel and Picnic) have been designed to fit both small and large Modis EDCs. It is expected that customers will purchase more than one Modis pack in order to maximise the use of the Modis EDC backpack.
- Gem Rossi added that BackOffice would continue to sell the traditional EDC alongside the Modis version of the EDC.

- All Modis Packs would have the same price point (probably H\$50 but to be confirmed) and the combined selling price of the Modis EDC plus a single internal pack would be higher than the traditional EDC.

### **Cycle backpacks**

- Development is almost complete and the Development Team is very nearly ready to perform the handover to manufacturing. However, launch plans have been postponed due to senior management fears that this product, like the Baby Kit Backpack, will fail entirely or over stretch/dilute the BackOffice brand.
- Gem Rossi stated that additional market research on cycle backpacks, commissioned after the failure of the baby kit backpack, was still ongoing. The cycle backpacks were thought to appeal to a more health-conscious market segment that might be less convinced by the upmarket brand than BackOffice's usual customers. The choice to develop cycle backpacks and not panniers (a cycle bag that hangs off the side of the back of a bike) was made deliberately. This was to maintain continuity of image and retain the essence of what the BackOffice brand stands for. The cycle backpack is intended for transporting a laptop and a change of clothes safely whilst on a commute to work rather than a bag used for more substantial outdoor adventures such as camping and touring.
- A direct competitor is planning to launch a cycle bag and BackOffice would need to respond to this threat should the senior management approve the launch.

### **Cabin bags**

- Development is nearing completion as the prototype has just been approved. There is no firm date for product launch yet.
- This is a new market, and there is already a lot of competition. Gem Rossi stated that the BackOffice branding will help the company to stand out from this competition.
- There will be two models in the range to start with, each designed to meet cabin bag size requirements for most airlines. The cabin bags have been designed to complement the EDC range, and the intention is to target business travellers.

## Tax regime in Hland

- The corporate income tax rate to be applied to taxable profits is 25%.
- Unless otherwise stated below, accounting rules on recognition and measurement are followed for tax purposes.
- The following expenses are not allowable for tax purposes:
  - accounting depreciation
  - amortisation
  - impairment charges
  - entertaining expenditure
  - donations to political parties
  - taxes paid to other public bodies.
- Tax depreciation allowances are available on all items of plant and equipment (including computer equipment) at a rate of 25% per year on a reducing balance basis. A full year's allowance is available in the year that the asset is acquired. Tax depreciation allowances are not available for property assets.
- Tax losses can be carried forward indefinitely to offset against future taxable profits from the same business.
- Sales tax is charged on all standard rated goods and services at a rate of 20%. Tax paid on inputs into a business can be netted off against the tax charged on outputs from that business. All businesses are required to pay over the net amount due on a monthly basis.



## Operational Case Study Exam

Maximum Time Allowed: 3 Hours

Welcome, Candidate Name

If this is not your name, please let your administrator know.

Click **Next** to start the test.

This examination is structured as follows:

Section number	Time for section (minutes)	Number of tasks	Number of sub-task/s	% time to spend on each sub-task
1	45	1	4	(a) 24% (b) 24% (c) 32% (d) 20%
2	45	1	3	(a) 32% (b) 28% (c) 40%
3	45	1	2	(a) 48% (b) 52%
4	45	1	4	(a) 36% (b) 16% (c) 24% (d) 24%

Each section (task) has a number of sub-tasks. An indication of how much of the time available for the section that you should allocate to planning and writing your answer is shown against each sub-task in the text of the question (and summarised in the table above).

This information will be available for you to access during the examination by clicking on the pre-seen button.

Reference Material

Pre-seen

Today is 1 December 2024. BackOffice's new Cycle Backpack's development is complete. The Senior Management Team (SMT) will have to decide soon whether to launch this product.

You receive the following email:

**From:** Leo Lane, Finance Manager  
**To:** Finance Officer  
**Subject:** Cycle Backpack sales

We need to establish a sales forecast for the new Cycle Backpack for the SMT. Gem Rossi, Sales & Marketing Director, has obtained industry information about the volume of cycle panniers sold in Veeland, a neighbouring country in Europe, in recent years and I have used this to establish a time series analysis (Schedule 1, attached).

Please prepare a briefing paper for the SMT that explains:

- What the time series information in Schedule 1 tells us about demand for cycle panniers in Veeland.  
*(sub-task (a) = 24%)*
- Three limitations of this information for the purpose of forecasting the likely demand for BackOffice's new Cycle Backpack.  
*(sub-task (b) = 24%)*

The Cycle Backpack is likely to appeal to potential customers outside of our current market, people who like to stay fit by cycling. If we decide to sell Cycle Backpacks, Gem Rossi wants to use a promotional company that specialises in cycling products to help launch the range, ahead of the competition. She plans to engage the promotional company to manage a campaign focussed on the cycling market and has shortlisted three companies. As the market reaction to the Cycle Backpack is uncertain, I have produced a payoff table (Table 1 attached) and a regret table (Table 2 attached) to assist the SMT to decide which company to use.

Please include in the briefing paper an explanation of:

- How we could use maximax, maximin and minimax regret decision criteria to decide which promotional company we should use. Please also state which company would be selected under each criterion.  
*(sub-task (c) = 32%)*
- Two non-financial considerations we should consider when making this decision.  
*(sub-task (d) = 20%)*

Leo Lane  
Finance Manager  
BackOffice

The attachments to the email can be found by clicking on the Reference Material button above.

**Schedule 1: Time series information for cycle pannier sales in Veeland**

These results are based on the quarterly volume of panniers sold in Veeland from January 2019 to December 2022.

**Trend line**

$$Y = 26,000 + 300Q$$

**Key:**

Y = number of panniers sold a quarter.

Q = the quarter number (where Q = 1 is the first quarter of 2019).

**Average seasonality**

January–March	-40%
April–June	+50%
July–September	+20%
October–December	-30%

## Schedule 1 Table 1 &amp; Table 2

**Table 1: Cycle Backpack launch - Payoff table showing the net contribution generated by each promotional company**

Market Reaction	Company A	Company B	Company C
	H\$	H\$	H\$
Poor	22,000	30,000	29,000
Average	122,000	125,000	118,500
Good	372,000	370,000	258,000

**Table 2: Regret matrix**

Market Reaction	Company A	Company B	Company C
	H\$	H\$	H\$
Poor	8,000	0	1,000
Average	3,000	0	6,500
Good	0	2,000	114,000

Reference Material

Pre-seen

Write the briefing paper requested by Leo Lane in the box below.



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Reference Material

Pre-seen

Several weeks later, the Senior Management Team (SMT) has decided to manufacture and sell the Cycle Backpack.

You receive the following email:

**From:** Leo Lane, Finance Manager  
**To:** Finance Officer  
**Subject:** Cycle Backpack sewing machines

We have just purchased 4 specialist sewing machines for the manufacture of the new Cycle Backpacks and the SMT wants to know how this will affect our financial statements for the year ending 30 June 2025.

The machines will be depreciated on a straight-line basis over 10 years and will be eligible for special first-year tax depreciation allowances equal to 100% of purchase price. I have attached a cost schedule for the sewing machines to this email (Table 1).

Please write the first draft of a briefing paper for the SMT that explains:

- How the expenditure on the sewing machines shown in Table 1 should be recorded in our statement of financial position and statement of profit or loss for the year ending 30 June 2025.  
*(sub-task (a) = 32%)*
- How the expenditure on the sewing machines shown in Table 1 will impact the calculation of corporate income tax payable for the year ending 30 June 2025, assuming that we take advantage of the 100% first-year tax depreciation allowance.  
*(sub-task (b) = 28%)*

As these are specialist machines, we are going to outsource their maintenance and repair to an outside company. We have shortlisted two suppliers and I have compiled a table of ratios in order to compare their working capital performance (Table 2 attached).

Please include in your briefing paper an explanation of:

- The ratios in Table 2 and possible reasons for the differences in the ratios between Supplier 1 and Supplier 2, including any reasons BackOffice may prefer one supplier over the other.  
*(sub-task (c) = 40%)*

Leo Lane  
Finance Manager  
BackOffice

The attachments to the email can be found by clicking on the Reference Material button above.

**Table 1: Cost schedule for Cycle Backpack sewing machines**

		<b>H\$</b>
Purchase price	4 machines @ H\$22,500 each	90,000
Installation	4 machines @ H\$500 each	2,000
Training costs		1,000
<b>Total cost</b>		<b>93,000</b>

**Note:**

- The sewing machines will be installed on 1 March and available for use from 1 April 2025, after the training has been completed.

**Table 2: Maintenance and repair suppliers' ratios**

	<b>Supplier 1</b>	<b>Supplier 2</b>
Inventory turnover	45 times	4 times
Receivables turnover	6 times	13 times
Payables turnover	16 times	5 times
Current ratio	8.0:1	2.5:1

**Notes:**

- Both suppliers have similar total revenues and charge the same prices.
- Both suppliers have similar cash and bank balances.
- Supplier 1 purchases most of the inventory (components) needed to repair its customers' machines on a just-in-time basis.

Reference Material

Pre-seen

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Reference Material

Pre-seen

A week later, budgets are needed. It will be challenging to produce accurate budgets for the Cycle Backpacks and the other new products. Challenges include: (i) the uncertainty of demand, (ii) the unknown effect the launch will have on the sales of existing products and (iii) an inability to secure prices with some key suppliers. BackOffice is also experiencing difficulties in establishing a cost for the cycle app that will be released as part of the Cycle Backpack's features.

You receive the following email:

**From:** Leo Lane, Finance Manager  
**To:** Finance Officer  
**Subject:** Rolling budgets and the digital app

Hilary Sec, Finance Director, has suggested that, in light of the level of uncertainty we are facing with our new products and expanding markets, we should consider using rolling budgets.

Please prepare a briefing paper for the Senior Management Team (SMT) which explains:

- What a rolling budget is and the potential benefits and drawbacks of adopting rolling budgets throughout the business.

*(sub-task (a) = 48%)*

We have developed a cycling app that can be downloaded to most smartphones and will monitor routes, distance and speed. The app will be available to download for everyone willing to pay an annual fee but will be available at a considerable discount to all who buy our Cycle Backpack. I have detailed the costs associated with the app in Schedule 1, attached to this email. We need to establish the cost per app download, but this is proving to be difficult and the SMT would like to know why.

Please include in your briefing paper, using the information in Schedule 1, an explanation of:

- How to determine the cost per app download and the difficulties associated with determining this.

*(sub-task (b) = 52%)*

Leo Lane  
Finance Manager  
BackOffice

The attachment to the email can be found by clicking on the Reference Material button above.

**Schedule 1: Cycle Backpack app costs to BackOffice**

<b>Fixed costs</b>	<b>Note</b>	<b>H\$</b>
Di Digitali - development costs	1	450,000
Annual hosting costs	2	300,000
BackOffice annual management costs	3	50,000
<b>Variable costs</b>		
Hosting cost (per download)	2	0.5
<b>Daily costs</b>		
Di Digitali - maintenance and upgrade cost (per day as required)	4	600

**Notes:**

1. Di Digitali is an external company that developed the app in consultation with, and to a specification set by, BackOffice.
2. Hosting the app will be outsourced to an external company.
3. It is expected that various members of the existing management team will help supervise work on the app as and when required.
4. All future upgrades and maintenance work will be commissioned as and when required. How much work will be required will depend largely on the success of the app development.

Reference Material

Pre-seen

Write the briefing paper requested by Leo Lane in the box below.



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Reference Material

Pre-seen

It is early September 2025. Production of the Cycle Backpack has been running efficiently and sales exceed initial forecasts.

Leo Lane calls you into his office and says:

“As you know, “International cycle to work day” was in August and Gem Rossi, Sales & Marketing Director, spearheaded an unplanned promotional campaign around this day. The campaign was focussed entirely on website sales and included links from other relevant websites to our Cycle Backpack page. Visitors who used the link were entitled to a free water bottle for every Cycle Backpack purchased. Gem thought that the high-selling price of our product would discourage most who clicked on the link but felt that BackOffice should take this opportunity to reach new customers. The Senior Management Team (SMT) wants us to comment on the Key Performance Indicator (KPIs) and the sales variances (Table 1 and Table 2, which I will give you shortly).

Please draft a briefing paper for the SMT that explains:

- What the KPIs shown in Table 1 indicate about the website performance for August, noting any effect the promotional campaign may have had.  
*(sub-task (a) = 36%)*
- What the sales variances in Table 2 mean and whether they might have been caused by the promotional campaign.  
*(sub-task (b) = 16%)*

All Cycle Backpacks are sewn by machinists on a specialist machine. We have only 4 specialist machines and, as they are a bottleneck resource, in August, we decided to run them continuously. I have prepared the direct labour variances for the Sewing Department in Table 3 (which I will give you shortly).

The company we employ to maintain our machines reported that the specialist machines may have been set up incorrectly when installed, causing them to run slower than expected. This will be investigated as part of the maintenance contract in November but can be investigated immediately for an additional fee. I have included the expected value for this decision in Table 4 (which I will give you shortly).

Please include in your briefing paper an explanation of:

- The meaning and possible causes of the direct labour variances in Table 3.  
*(sub-task (c) = 24%)*
- What the expected values shown in Table 4 mean and how they can be used to decide whether to pay the maintenance company to investigate the machine set up immediately”.  
*(sub-task (d) = 24%)*

Leo Lane hands you Tables 1, 2, 3 and 4 which can be found by clicking on the Reference Material button.

**Table 1: August website sales Key Performance Indicators (KPIs)**

KPI	Actual	Target
Customer acquisition cost (promotion cost per customer order placed)	H\$11	H\$6
Bounce rate (customer leaving after viewing a single page)	60%	20%
Cart abandonment rate	4%	8%

**Table 2: August Cycle Backpack sales variances (website and retail agents)**

Variance	H\$
Sales price variance	15,400 favourable
Sales profit volume variance	17,000 favourable

**Notes:**

- All sales through the website were at standard selling price.
- Sales volumes through the retail agents were lower than budgeted.

**Table 3: August Cycle Backpack direct labour variances (Sewing Department)**

Variance	H\$
Direct labour rate	2,400 adverse
Direct labour idle time	320 adverse
Direct labour efficiency	6,880 adverse

**Notes:**

- 2,400 hours were paid during August.
- Machinists worked far more than their contracted hours to run the machines continuously.
- Machinists were given a temporary H\$1 per hour pay increase during August.
- The machines were shut down for servicing for 16 hours in August.

**Table 4: Expected values for investigating the set-up of machines**

Predicted outcome for immediate investigation	Cost H\$	Probability	Expected value H\$
No set-up error	76	0.7	53.20
Set-up error	1,504	0.3	451.20
<b>Expected value</b>			<b>504.40</b>

Predicted outcome for no immediate investigation	Cost H\$	Probability	Expected value H\$
No set-up error	76	0.7	53.20
Set-up error	5,320	0.3	1,596.00
<b>Expected value</b>			<b>1,649.20</b>

**Note:**

The maintenance company will charge H\$500 to investigate immediately. This cost is not included in the figures above.

Reference Material

Pre-seen

Write the briefing paper requested by Leo Lane in the box below.



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Thank you for completing the Operational Case Study Exam.

Before you leave, don't forget to collect your printed confirmation of attendance.

Please click the End Exam (E) button before leaving the testing room quietly.



## Operational Case Study Exam

Maximum Time Allowed: 3 Hours

Welcome, Candidate Name

If this is not your name, please let your administrator know.

Click **Next** to start the test.

This examination is structured as follows:

Section number	Time for section (minutes)	Number of tasks	Number of sub-task/s	% time to spend on each sub-task
1	45	1	3	(a) 36% (b) 16% (c) 48%
2	45	1	3	(a) 24% (b) 28% (c) 48%
3	45	1	3	(a) 32% (b) 28% (c) 40%
4	45	1	2	(a) 36% (b) 64%

Each section (task) has a number of sub-tasks. An indication of how much of the time available for the section that you should allocate to planning and writing your answer is shown against each sub-task in the text of the question (and summarised in the table above).

This information will be available for you to access during the examination by clicking on the pre-seen button.

Reference Material

Pre-seen

Today is 1 December 2024. In preparation for the launch of the Salvare range, the choice of supplier for the polyester fabric made of pre-used polyethylene terephthalate (PET) bottles is ongoing.

You receive the following email:

**From:** Leo Lane, Finance Manager

**To:** Finance Officer

**Subject:** PET polyester supplier and CGMA's cost transformation model

We have shortlisted two potential PET polyester suppliers and the Senior Management Team (SMT) will make the final choice this week. I need your help presenting some of the information they need to make that choice. I have prepared some Key Performance Indicators (KPIs) in Table 1, which I have attached to this email.

Please draft a briefing paper for the SMT that explains:

- The three KPIs in Table 1, including any concerns you may have using them to rank the two suppliers.

*(sub-task (a) = 36%)*

Supplier 1 is committed to reducing delivery kilometres and would only make one delivery to us each quarter. As we cannot be sure how much PET polyester we need, Supplier 1 proposes that it holds an inventory of PET polyester in our storeroom. It would pay the storage costs and retain legal title. We would be invoiced for PET polyester only when it was issued to production. Payment would be due in 14 days.

Please include in the briefing paper an explanation of:

- The effect Supplier 1's proposal would have on our working capital cycle.

*(sub-task (b) = 16%)*

Hilary Sec, Finance Director, wants us to explain three aspects of CGMA's cost transformation model to the SMT. The model has been presented to the SMT before but they are concerned that it will not be useful to us because we are a premium brand. The three aspects are:

1. Generating maximum value through new products.
2. Managing the risks inherent in driving cost-competitiveness.
3. Incorporating sustainability to optimise profits.

I think that the recent work done with our new products would help explain the usefulness of these aspects to the SMT.

Please also include in the briefing paper for the SMT an explanation of:

- The three areas of the CGMA cost transformation model identified above and how these apply to recent work done on our new products.

*(sub-task (c) = 48%)*

Leo Lane  
Finance Manager  
BackOffice

The attachment to the email can be found by clicking on the Reference Material button above.

**Table 1: Key Performance Indicators (KPIs) relating to PET polyester suppliers' performance**

KPI	Supplier 1	Supplier 2
Recycled material usage	98%	100%
Tear strength (Newtons)	320	280
Waste reduction in manufacturing (Note)	49%	68%

**Note:**

Waste reduction has been calculated over a 5-year period, using the following formula:

$$\left( \frac{(\text{Quarter 4 2019 total waste (KG)} - \text{Quarter 3 2024 total waste (KG)})}{\text{Quarter 4 2019 total waste (KG)}} \right) \times 100$$

Reference Material

Pre-seen

Write the briefing paper requested by Leo Lane in the box below.



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Reference Material

Pre-seen

Later that week, the Salvare range is the focus of the Senior Management Team (SMT).

You receive the following email:

**From:** Leo Lane, Finance Manager  
**To:** Finance Officer  
**Subject:** Salvare range's new cutting machinery and breakeven

We will need a specialist cutting machine for the Salvare range and there is debate over whether it would be better to buy or lease it. The SMT wants to understand all aspects of the financial implications of launching new products and has asked for details of how the right-of-use asset would be treated in our financial statements, assuming the asset was leased. Details of a lease we have been considering are in Table 1 (attached).

I would like you to draft a briefing paper which explains:

- How the right-of-use asset would be initially recorded and subsequently measured in our financial statements for the year ending 30 June 2025.

*(sub-task (a) = 24%)*

If we purchased the cutting machine, it would cost H\$250,000 on 1 March 2025 and we would finance it from our bank current account, although we might need to use our overdraft facility.

Please also include in the briefing paper an explanation of:

- How the lifetime cash-flow from taking up the lease, detailed in Table 1, would differ from the lifetime cash-flow of purchasing the cutting machine. Please also explain which option would be most appropriate to the company circumstances.

*(sub-task (b) = 28%)*

The SMT has to decide how to promote the launch of the Salvare range (five products in total). There are two different approaches under consideration: a conventional campaign and a campaign that includes a H\$25 donation BackOffice would make to a climate change charity for every Salvare backpack sold. I have presented both options on a profit-volume chart (Chart 1 attached) for the quarter following the launch.

Please include in your briefing paper an explanation of:

- What Chart 1 indicates about the comparative results of the two Salvare promotional campaigns for the quarter following the launch. Your comparison should consider fixed costs, breakeven points, margins of safety, revenues and gradients of the product lines.

*(sub-task (c) = 48%)*

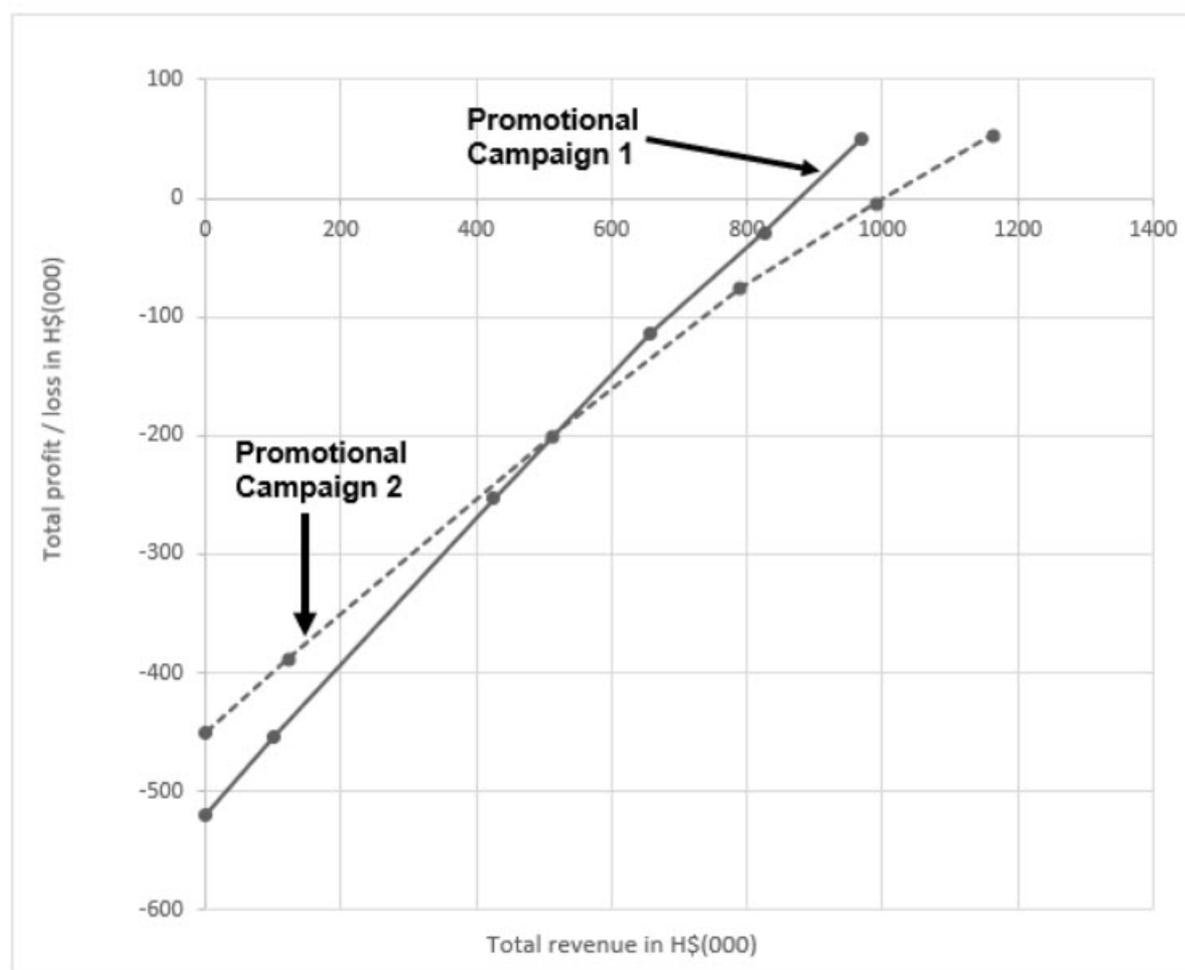
Leo Lane  
Finance Manager  
BackOffice

The attachments to the email can be found by clicking on the Reference Material button above.

**Table 1: Details of the potential lease arrangement**

Annual lease payments	H\$60,000
Lease arrangement fee	H\$5,000
Lease commencement date	1 March 2025
First lease payment due	1 March 2025
Date asset will be available for use	1 March 2025
Lease period	5 years
Useful life of underlying asset	9 years
Owner at end of lease period	Lessor
Interest rate implicit in the lease	6%

**Chart 1: Multi-product profit-volume chart for the Salvare range for the quarter following launch**



**Notes:**

- The contribution to sales ratios used in the above chart are as follows:

Products in the range	Promotional Campaign 1	Promotional Campaign 2
Salvare 1	0.65	0.51
Salvare 2	0.62	0.48
Salvare 3	0.60	0.45
Salvare 4	0.54	0.36
Salvare 5	0.51	0.34
<b>Weighted average</b>	<b>0.59</b>	<b>0.43</b>

- Total fixed costs include the cost of promotion plus the range's share of production and distribution costs. These latter costs are the same regardless of the campaign.
- All selling prices and variable production costs will be the same for both campaigns.
- Promotional Campaign 2 includes a H\$25 donation for every Salvare backpack sold.

Reference Material

Pre-seen

Write the briefing paper requested by Leo Lane in the box below.



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- Redo icon
- Table icon
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- Paragraph dropdown menu
- Table dropdown menu
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Reference Material

Pre-seen

A week later, the Senior Management Team (SMT) remains focussed on the sales volume for the Salvare range. Draft budgets are almost complete.

Leo Lane, Finance Manager, approaches your desk and says:

"Although draft fixed budgets for the first quarter's manufacture and sales of the Salvare range have been prepared, some aspects still have to be finalised. The SMT wants to understand the effect that the two different promotional campaigns could have on profits, and Hilary Sec, Finance Director, has asked that we prepare a "what-if" analysis to present to the SMT. I have prepared the analysis and would like you to write the explanation. The "what-if" analysis is in Table 1, which I will give you shortly.

Please prepare a briefing paper that explains:

- The effect that each of the two promotional campaigns would have on the original budgeted contribution and profit, based on the information in Table 1. Please also explain two limitations of the what-if analysis in this situation.

*(sub-task (a) = 32%)*

I used a risk neutral approach to establish the sales volumes for the original budget in Table 1. I believe the SMT will want more information about this approach. I have included information relating to the expected sales volume in Table 2 (which I'll also give you shortly).

Please include in the briefing paper, using the information in Table 2, an explanation of:

- The risk neutral approach taken to establish the sales volume of the original budget together with the limitations of using this approach.

*(sub-task (b) = 28%)*

As there is uncertainty in our budget estimates, particularly regarding the sales volumes, I am considering using flexible budgeting for the Salvare range. This should improve budgetary planning and control, but we will need to explain it to the SMT.

Please also include in the briefing paper, using the information in Table 1, an explanation of:

- How to construct a flexible budget for the Salvare range. Please also explain how we would use flexible budgeting for planning and control purposes for the Salvare range."

*(sub-task (c) = 40%)*

Leo Lane then hands you Tables 1 and 2, which can be found by clicking on the Reference Material button above.

**Table 1: What-if analysis for the Salvare range for the first quarter following launch**

	Original budget H\$000	Promotional campaign 1 H\$000	% Change	Promotional campaign 2 H\$000	% Change
Revenue	823	971	+18.0%	1,163	+41.3%
Variable costs	(339)	(400)	+18.0%	(657)	+93.8%
<b>Contribution</b>	<b>484</b>	<b>571</b>	<b>+18.0%</b>	<b>506</b>	<b>+4.5%</b>
Fixed costs	(450)	(520)	+15.6%	(450)	0.0%
<b>Profit</b>	<b>34</b>	<b>51</b>	<b>+50.0%</b>	<b>56</b>	<b>+64.7%</b>

**Notes:**

- Promotional campaign 1 increases the promotional fixed cost by H\$70,000 and assumes that, as a direct result, sales volumes will increase by 18.0%.
- Promotional campaign 2 increases the promotional variable cost per backpack by H\$25 and assumes that, as a direct result, sales volumes will increase by 41.3%.

**Table 2: Information relating to the sales volume used in Table 1**

	<b>Original budget</b>
Expected value (volume)	5,023 backpacks
Range of possible outcomes for sales volume	400 – 12,000 backpacks
Standard deviation	3,291 backpacks

**Note:**

Probabilities for the different possible outcomes for sales volume were provided by an experienced marketing research company.

Reference Material

Pre-seen

Write the briefing paper requested by Leo Lane in the box below.



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Reference Material

Pre-seen

It is July 2025. The Salvare range was launched in April. Leo Lane, Finance Manager, left the company abruptly 2 days ago.

You receive the following email:

**From:** Hilary Sec, Finance Director  
**To:** Finance Officer  
**Subject:** Salvare year-end issues and June variance commentary

I have found a list of issues (Schedule 1 attached) that Leo Lane was working on. Some of the issues are going to affect our financial statements for the year ended 30 June 2025, which have not yet been finalised. Leo was going to explain the impact to the Senior Management Team (SMT). I would like you to take over this work.

Please prepare a briefing paper that explains:

- How each issue in Schedule 1 should be treated in our financial statements for the year ended 30 June 2025.

*(sub-task (a) = 36%)*

Leo compiled some of the June variances for the Salvare range. Although he left a commentary, he did not leave an explanation of how it applied to the specific variances. I want you to add explanations to the variances. I know that you might not have seen the Salvare cost cards, but apart from materials they are almost identical to our other ranges. I have attached the variances and commentary to this email (Schedule 2).

Please include in your briefing paper an explanation of:

- What the variances in Schedule 2 mean and, based on Leo's commentary, possible reasons for their occurrence.

*(sub-task (b) = 64%)*

Hilary Sec  
Finance Director  
BackOffice

The attachments to the email can be found by clicking on the Reference Material button above.

**Schedule 1: List of year-end issues: Salvare range**

Issue originator	Detail
1/ Zed Abuto, Human Resource Director	<ul style="list-style-type: none"><li>• In May, Employee X was injured while using the specialist Salvare cutting machine.</li><li>• In June, we received letters from his legal representative demanding compensation.</li><li>• On 1 July 2025, we paid Employee X H\$30,000 compensation.</li></ul>
2/ Fi Attia, Head of Retailer Sales	<ul style="list-style-type: none"><li>• On 3 July 2025, Fi received a call from a furious client who had just received 20 faulty backpacks (total retail price = H\$3,330 and total manufacturing cost = H\$1,480).</li><li>• As a goodwill gesture, Fi replaced the 20 backpacks free of charge and told the client to destroy the faulty ones as they were worthless.</li><li>• All 20 faulty backpacks were in finished goods inventory on 30 June 2025.</li></ul>
3/ Toni Guthrie, Head of Website Sales	<ul style="list-style-type: none"><li>• 40 backpacks in inventory at the year-end (total retail price = H\$7,480 and total manufacturing cost = H\$3,480) were found to have minor faults just before the year-end.</li><li>• These 40 backpacks could be sold as seconds for H\$3,500 in total. Alternatively, they could be scrapped.</li><li>• The backpacks would need repacking in seconds packaging before they could be sold. (This would cost H\$400 in total).</li></ul>

**Schedule 2: Salvare range variances for June**

Variance	H\$	
Direct labour rate	5,123	Adverse
Direct labour idle time	5,973	Adverse
Direct labour efficiency	3,982	Favourable
Variable overhead expenditure	3,740	Adverse
Variable overhead efficiency	2,430	Favourable
Fixed overhead expenditure	1,113	Adverse
Fixed overhead capacity	117	Favourable
Fixed overhead efficiency	782	Favourable

Variance information	
Actual direct labour hours paid	4,700 hours
Actual direct labour hours worked	4,400 hours
Standard direct labour hours to produce actual output	4,600 hours
Actual number of backpacks produced	2,000 units

**Commentary**

Following an accident involving the specialist cutting machine in May, an investigation revealed that the machine was being systematically used incorrectly by most operatives. Further training for all operatives was scheduled and completed in June. Unfortunately, the cutting machine broke-down before the training took place and was out of use for days. BackOffice had to pay for the repairs to the machine as the lease company insisted that the warranty did not cover "improper use". While the repair was taking place, the sewing machinists ran out of cut pieces to sew. Work was rescheduled so that they were occupied, but this took time. Following the cutting machine's repair, in an attempt to reduce the backlog, all direct workers were offered overtime. In addition, we hired some experienced sewing machinists on an hourly basis from a temp agency during the second half of June.

Reference Material

Pre-seen

Write the briefing paper requested by Hilary Sec in the box below.



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Thank you for completing the Operational Case Study Exam.

Before you leave, don't forget to collect your printed confirmation of attendance.

Please click the End Exam (E) button before leaving the testing room quietly.



## Operational Case Study Exam

Maximum Time Allowed: 3 Hours

Welcome, Candidate Name

If this is not your name, please let your administrator know.

Click **Next** to start the test.

This examination is structured as follows:

Section number	Time for section (minutes)	Number of tasks	Number of sub-task/s	% time to spend on each sub-task
1	45	1	3	(a) 28% (b) 36% (c) 36%
2	45	1	2	(a) 48% (b) 52%
3	45	1	3	(a) 40% (b) 20% (c) 40%
4	45	1	3	(a) 28% (b) 24% (c) 48%

Each section (task) has a number of sub-tasks. An indication of how much of the time available for the section that you should allocate to planning and writing your answer is shown against each sub-task in the text of the question (and summarised in the table above).

This information will be available for you to access during the examination by clicking on the pre-seen button.

Reference Material

Pre-seen

Today is 1 December 2024. The Research & Development Department has admitted that the development of the Modis Packs is now over budget and is unlikely to be completed by the January deadline. This has come as a shock to the Senior Management Team (SMT).

You receive the following email:

**From:** Leo Lane, Finance Manager  
**To:** Finance Officer  
**Subject:** Damaged assets, beyond budgeting and KPIs

The SMT has just discovered that the Modis development is over budget and behind schedule. It has a meeting today to discuss the issues that allowed this to occur. The SMT needs information from the Finance Department and I would like your help. One reason the Modis Packs development has been delayed is that a machine used for the production of prototype packs was damaged; this probably added to departmental costs too. Cho Wing, Head of Prototype, sent me the details of this on Schedule 1 (attached) and I have added notes.

Please draft a briefing paper which explains:

- How the damaged machine identified in Schedule 1 will be recorded in our financial statements for the year ending 30 June 2025.

*(sub-task (a) = 28%)*

The SMT wants to know how beyond budgeting differs from our usual incremental budgeting approach and if it would benefit the Research & Development Department.

Please add to your briefing paper an explanation of:

- How the principles of a beyond budgeting approach differ from an incremental budgeting approach and the benefits of using beyond budgeting for the Research & Development Department.

*(sub-task (b) = 36%)*

The SMT believes that to prevent recent problems in the Research & Development Department occurring again, we need to consider a more rigorous approach to measuring its performance. The SMT wants us to suggest suitable Key Performance Indicators (KPIs) to help achieve this.

Please include in your briefing paper:

- Suggestions for three KPIs, suitable for appraising the performance of our Research & Development Department, explaining how each would be measured and why it would be appropriate.

*(sub-task (c) = 36%)*

Leo Lane  
Finance Manager  
BackOffice

The attachment to the email can be found by clicking on the Reference Material button above.

**Schedule 1 - The damaged machine used for prototypes**

Date	Detail
1 Nov 2024	The machine was damaged and required repair before it could be used again.
1 Nov 2024	<p><b>BackOffice's records showed</b></p> <ul style="list-style-type: none"><li>• The carrying amount of the machine was H\$14,800 and its remaining useful life 5 years.</li><li>• The estimated value-in-use of the machine was H\$10,000.</li></ul> <p><b>A maintenance engineer attended the machine and reported:</b></p> <ul style="list-style-type: none"><li>• The machine had lost all its automatic functioning facility.</li><li>• The machine could perform all tasks but, due to the loss of the automatic facility, would now operate at a much slower rate than previously.</li><li>• The machine's useful life was now reduced to 3 years.</li></ul>
1 Nov 2024	Research indicates that the current net resale value of the machine is H\$5,200 and that a replacement machine would cost H\$20,000.

Reference Material

Pre-seen

Write the briefing paper requested by Leo Lane in the box below.



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Reference Material

Pre-seen

A few days later, the Senior Management Team (SMT) is focussed on issues relating to the Modis range.

You receive the following email:

**From:** Leo Lane, Finance Manager  
**To:** Finance Officer  
**Subject:** Influencers and costing methods

Gem Rossi, Sales & Marketing Director, wants to give 30 influencers the three prototype Modis Packs and EDC to use and review. There is no budget for this and the other members of the SMT want to know the cost of this proposal before approving it. Gem has produced a costing (Schedule 1 attached) and wants us to re-cost it using relevant cost principles. She believes the relevant cost will be lower.

Please draft a briefing paper for the SMT which explains:

- With clear justifications, the relevant cost for each of the costs in Schedule 1. Please explain why a relevant cost approach does not always result in a lower value for the costs detailed in Schedule 1.  
*(sub-task (a) = 48%)*

Hilary Sec, Finance Director, thinks it might be more useful to use marginal costing principles for all aspects of our management accounts, rather than our usual absorption costing method. She wants to explain to the SMT the differences in the two methods, plus the benefits of using marginal costing. I have drafted budget statements for the Modis Pack's first 2 months of trading using both methods (Schedule 2 attached) and would like you to add a commentary.

Please include in the briefing paper an explanation of:

- The differences between the profit statements in Schedule 2, and the profits they show, in each of the 2 months. Please also explain the benefits to our business of using a marginal costing approach when producing management accounts.  
*(sub-task (b) = 52%)*

Leo Lane  
Finance Manager  
BackOffice

The attachments to the email can be found by clicking on the Reference Material button above.

**Schedule 1 – Cost of giving Modis products to the influencers**

Detail	Note	Quantity	Total cost	
			H\$	H\$
EDC	1	30	77.07	2,312
Direct material – Ballistic nylon (square metres)	2	36	12.00	432
Direct material – Fleece (kg)	3	45	2.30	104
Direct material – Velcro (metres)	4	90	3.00	270
Direct labour (hours)	5	99	22.00	2,178
Variable production overheads (labour hours)	6	99	2.50	248
Fixed production overhead (labour hours)	7	99	3.00	297
Cost of couriating to the influencers		30	10.00	300

**Notes:**

1. We have 30 traditional EDCs in inventory that would be adapted for the Modis Packs. These were returned by customers who had paid H\$120 each for them. We could now sell them for H\$50 each. The full manufacturing cost was H\$77.07 and the marginal manufacturing cost was H\$68.35 per pack.
2. The ballistic nylon is in inventory and cost H\$432. Our supplier has just increased the price to H\$12.20 per square metre.
3. This fleece has been in inventory for 2 years and cost H\$104. The replacement cost would be H\$117. As the fleece is an unusual colour, we cannot use it in production, but we could sell it to a market trader for H\$1.00 per kg.
4. Velcro would be used to adapt the EDCs, making them suitable for the Modis Packs. We have already placed the order for this at H\$3 per metre.
5. Our standard hourly rate is H\$22 per hour. To manufacture the Modis Packs and adapt the EDCs, we would need to divert labour hours from other work that would generate H\$30.00 contribution per hour (after deducting labour costs).
6. Variable overhead is incurred as the direct labour hours are worked.
7. Fixed overhead is absorbed on direct labour hours.

**Schedule 2 – Budgeted profit statements for the Modis Packs using standard absorption costing and marginal costing for the first 2 months of trading**

	Month 1		Month 2	
Number of units produced	4,000		3,000	
Number of units sold	1,750		2,000	
	H\$	H\$	H\$	H\$
<b>Absorption costing</b>				
Sales	87,500		100,000	
Cost of sales				
Opening inventory	55,080		117,045	
Production cost	110,160		82,620	
Closing inventory	(117,045)		(144,585)	
		(48,195)		(55,080)
Over absorption		2,630		0
<b>Gross profit</b>		<b>41,935</b>		<b>44,920</b>
<b>Marginal costing</b>				
Sales	87,500		100,000	
Cost of sales				
Opening inventory	49,820		105,868	
Production cost	99,640		74,730	
Closing inventory	(105,868)		(130,778)	
		(43,592)		(49,820)
<b>Contribution</b>		<b>43,908</b>		<b>50,180</b>
Budgeted fixed production overhead		(7,890)		(7,890)
<b>Profit</b>		<b>36,018</b>		<b>42,290</b>

**Notes:**

- Annual budgeted fixed production overheads are H\$94,680 (H\$7,890 X 12 months).
- The overhead absorption rate is calculated using the annual budgeted fixed production overheads and the budgeted annual units produced.
- Production of the Modis packs would begin prior to Month 1 so that opening inventory in Month 1 would be 2,000 units.

Reference Material

Pre-seen

Write the briefing paper requested by Leo Lane in the box below.



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Reference Material

Pre-seen

It is now July 2025. The Modis Packs were launched in April and are a success.

Leo Lane, Finance Manager, calls you into his office and says:

"I have to give a presentation to the Website Sales Department about June's sales performance. I have picked out a selection of sales variances and added some relevant notes on Schedule 1, which I will give you in a moment. I want you to add commentary to the schedule. This is the first time we have shown variances to members of this department as part of their performance review, so the explanation needs to be detailed.

Please draft a briefing paper for me that explains:

- What each of the variances in Schedule 1 means and the reasons why each may have arisen.

*(sub-task (a) = 40%)*

A member of the Website Sales Department has complained that it was unfair they have to display prices inclusive of sales tax whilst the Retail Sales Department quoted sales prices net of sales tax which makes them much cheaper. I want to avoid confusion and, as all the sales variances are calculated net of sales tax, think we should explain the principles of sales tax.

Please add to the briefing paper an explanation of:

- What sales tax is and the effect it has on our profit or loss. Please explain why it is appropriate to price goods net of sales tax to retailers and inclusive of sales tax on the website.

*(sub-task (b) = 20%)*

The Website Sales Department wants as much information as possible in order to control performance in relation to the Modis Packs. I am going to include in the presentation an explanation of how we can improve our performance by using feedforward control as well as feedback control.

Please include in the briefing paper an explanation of both:

- Feedback and feedforward control and how each could be used to improve our performance. Please use the variance information in Schedule 1 to illustrate your explanations."

*(sub-task (c) = 40%)*

Leo Lane hands you Schedule 1, which can be found by clicking on the Reference Material button above.

**Schedule 1: Extract from the sales variance report for June 2025****Website Modis Packs sales variances**

	<b>H\$</b>	
Sales price	3,600	Adverse
Operational sales profit volume	6,741	Favourable
Planning sales profit volume	4,494	Adverse

**Website Small EDC sales variances**

	<b>H\$</b>	
Sales profit mix	236	Adverse
Sales profit quantity	4,786	Favourable

**Notes:**

1. Senior management reacted to the news that a competitor was about to launch a similar product to the Modis by reducing the budgeted sales volume from the beginning of June onwards.
2. Throughout June, there was a discount when two Modis Packs were purchased in the same transaction. The discount was initiated by the Website Sales Department, as a response to the news about the competitor, after the sales budget had been revised (See note 1).
3. The sales mix comprises Modis EDCs and the traditional EDCs.
4. The standard profit for a Modis EDC is lower than for a traditional EDC.
5. The sales profit quantity variance is currently being investigated as it was the most unexpected variance.

Reference Material

Pre-seen

Write the briefing paper requested by Leo Lane in the box below.



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- Subscript ( $x_2$ )
- Superscript ( $x^2$ )
- Text color ( $I_x$ )
- Paragraph dropdown
- Table dropdown
- Text alignment: Left, Center, Right, Justify
- Bulleted list and Numbered list
- Decrease indent and Increase indent

Reference Material

Pre-seen

**It is November 2025.****You receive the following email:****From:** Leo Lane, Finance Manager**To:** Finance Officer**Subject:** Modis Packs production constraint and inventory management

We are unable to fulfil all orders for Modis Office Packs this week. An error with our inventory system means we have 2,400 Modis Picnic Packs but barely any Office or Travel Packs in inventory. We cannot make all that we need because we do not have enough hours in the Sewing Department. I have calculated the most profitable production plan for the week, (Schedule 1 attached). There is an opportunity to buy in more sewing hours from an agency and I have added the cost of this in the notes in Schedule 1. This will need explaining to Jack Loren, Production Director, who is taking a personal interest in this matter and I would like your help.

Please draft a briefing paper for Jack that explains:

- The principles behind the production plan and how it has been used to determine the number we should make of each of the three types of Modis Packs.

*(sub-task (a) = 28%)*

- If, from both a financial and non-financial perspective, it is worth paying for the agency sewing labour.

*(sub-task (b) = 24%)*

Since April, we have been using the economic order quantity (EOQ) to replenish inventory of ballistic nylon. Jack has asked why this has not worked as last week we had a stock-out. I have compiled two charts in Schedule 2 (attached) comparing the planned and actual inventory levels since April and want you to add a commentary.

Please include in the briefing paper an explanation of:

- The assumptions underlying the EOQ model and what the two charts in Schedule 2 reveal about the management of our ballistic nylon inventory since April.

*(sub-task (c) = 48%)*

Leo Lane  
Finance Manager  
BackOffice

**The attachments to the email can be found by clicking on the Reference Material button above.**

**Schedule 1: Modis production plan and notes****Production plan**

Type of pack	Office	Picnic	Travel	Balance of hours available
	Units	Units	Units	
Sewing Department - maximum hours available				800
Production			750	447
Production		0		447
Production	745			0

**Notes:**

1.

<b>Ranking</b>			
Type of pack	Office	Picnic	Travel
Contribution per pack	H\$22.59	H\$23.59	H\$29.09
Sewing hours per pack	0.60	0.58	0.47
Contribution per sewing hour	H\$37.65	H\$40.67	H\$61.89
<b>Ranking</b>	<b>3</b>	<b>2</b>	<b>1</b>

2.

<b>Production requirement information</b>			
Type of pack	Office	Picnic	Travel
	Units	Units	Units
Finished goods in inventory	20	2,400	50
Demand (sales orders)	790	150	800

- We need another 15 sewing hours to make the 25 Office Packs needed to fulfil the sales orders.
- The agency rate is H\$38 an hour more than our in-house rate.

**Schedule 2: Ballistic nylon planned and actual inventory levels**

Chart 1

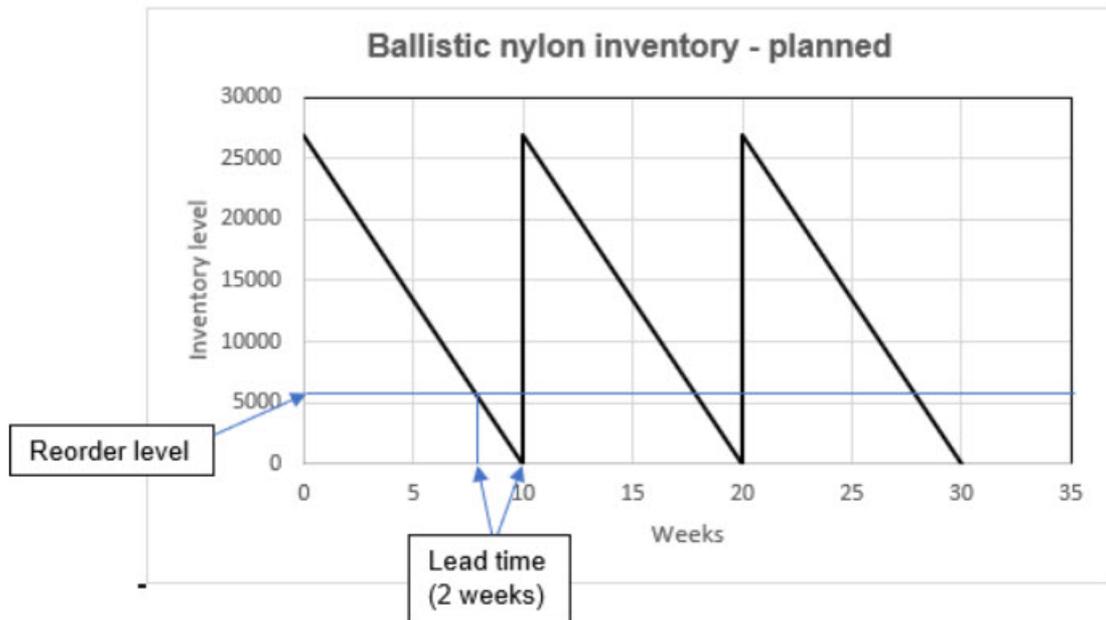
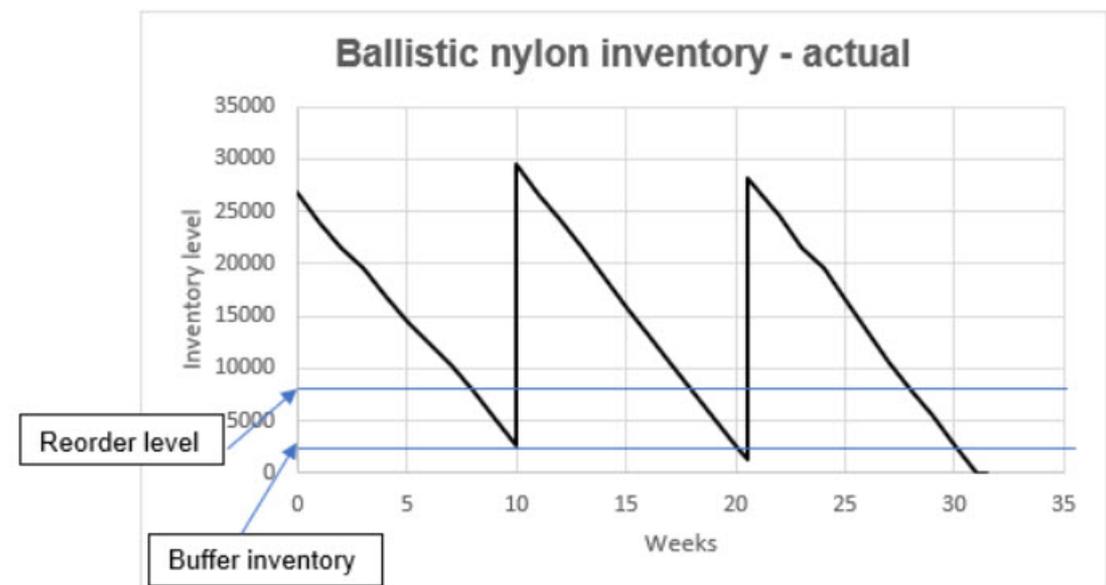


Chart 2



Reference Material

Pre-seen

Write the briefing paper requested by Leo Lane in the box below.



A rich text editor toolbar with the following icons from left to right: a document icon, a scissors icon, a copy icon, a paste icon, a left arrow, a right arrow, a link icon, a bold icon (B), an italic icon (I), an underline icon (U), a strikethrough icon (ABC), a subscript icon (x<sub>2</sub>), a superscript icon (x<sup>2</sup>), and a subscript icon (I<sub>x</sub>). Below these are two rows of alignment and list icons: the first row contains a paragraph dropdown, a table icon, and four text alignment icons (left, center, right, justified); the second row contains two list icons (bulleted and numbered) and two indent icons (left and right).



Thank you for completing the Operational Case Study Exam.

Before you leave, don't forget to collect your printed confirmation of attendance.

Please click the End Exam (E) button before leaving the testing room quietly.



## Operational Case Study Exam

Maximum Time Allowed: 3 Hours

Welcome, Candidate Name

If this is not your name, please let your administrator know.

Click **Next** to start the test.

This examination is structured as follows:

Section number	Time for section (minutes)	Number of tasks	Number of sub-task/s	% time to spend on each sub-task
1	45	1	3	(a) 32% (b) 36% (c) 32%
2	45	1	3	(a) 28% (b) 24% (c) 48%
3	45	1	3	(a) 36% (b) 28% (c) 36%
4	45	1	2	(a) 48% (b) 52%

Each section (task) has a number of sub-tasks. An indication of how much of the time available for the section that you should allocate to planning and writing your answer is shown against each sub-task in the text of the question (and summarised in the table above).

This information will be available for you to access during the examination by clicking on the pre-seen button.

Reference Material

Pre-seen

Today is 1 December 2024 and you receive the following email:

**From:** Leo Lane, Finance Manager  
**To:** Finance Officer  
**Subject:** Receivables management and sales forecasts

At the latest Senior Management Team (SMT) meeting, it was noted that receivable days for retailers has been growing. It was suggested that this could be improved by using the services of a factor under a with-recourse arrangement. I have prepared an aged analysis of the latest receivables balance shown in Schedule 1 (attached).

Please prepare a briefing paper for the SMT which explains:

- How a with-recourse factoring arrangement might improve both our ageing of receivables and our liquidity. Please also explain two factors to consider when deciding whether to use this arrangement.

**(sub-task (a) = 32%)**

At the meeting, it was also noted that a significant amount of profit margin is being given away to retailers and it was agreed that direct-to-customer sales be expanded by opening our own BackOffice retail stores. There was some discussion about the potential locations for these stores, including railway stations, airports, high streets and out-of-town shopping centres. It was suggested that before decisions were made about final locations, it would be useful to establish forecast sales for each type of potential retail store location. Gem Rossi, Sales & Marketing Director, suggested that an external consultant with expertise in big data analytics could be used for this purpose.

Please include in your briefing paper an explanation of:

- Big data analytics and the sources and types of big data that could be used to create a forecast of sales at different potential retail store locations.

**(sub-task (b) = 36%)**

- The potential problems associated with using big data to establish these forecasts that the external consultant will need to overcome.

**(sub-task (c) = 32%)**

Leo Lane  
Finance Manager  
BackOffice

The attachment to the email can be found by clicking on the Reference Material button above.

**Schedule 1: Aged analysis of receivables at 30 November 2024**

	Total outstanding H\$000	Invoice raised:			
		0 to 30 days ago H\$000	31 to 60 days ago H\$000	61 to 90 days ago H\$000	91 to 120 days ago H\$000
Large retailers	1,015	390	291	232	102
Small retailers	822	423	253	95	51
<b>Total</b>	<b>1,837</b>	<b>813</b>	<b>544</b>	<b>327</b>	<b>153</b>

**Notes:**

- There are eight large retailers, which are either national department stores or specialist bag retailer chains.
- There are over 100 small retailers, which are mostly independent specialist bag stores.
- Standard credit terms are 30 days. Some large retailers have negotiated longer terms ranging from 60 to 90 days from the date of invoice.

Reference Material

Pre-seen

Write the briefing paper requested by Leo Lane in the box below.

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Reference Material

Pre-seen

It is now January 2025, and the first BackOffice retail stores are due to open on 1 March 2025.

You receive the following email:

**From:** Leo Lane, Finance Manager  
**To:** Finance Officer  
**Subject:** Profit-volume chart and decision about SmartTech contract options

The Senior Management Team (SMT) has decided to expand the range of products available in store and via our website to include smart accessories (such as lights, Bluetooth speakers, remote theft alarms, cameras and smart pens). We are still negotiating with suppliers for some of these items, but I was asked to draw up an initial budget for the accessory range for the 4 months to 30 June 2025, which I have done. Hilary Sec, Finance Director, would like to present this to the SMT as a profit-volume chart. I have already drawn up the chart (Chart 1, attached) but would like you to complete the commentary needed.

Please prepare a briefing paper for the SMT which explains:

- The multi-product profit-volume chart (Chart 1) and what it indicates about the initial budget for the new accessories range.  
**(sub-task (a) = 28%)**
- The factors that should be considered when interpreting this chart.  
**(sub-task (b) = 24%)**

Arlo James, Managing Director, has been negotiating with a supplier, SmartTech, for the smart pens that will be included in the accessories range. SmartTech has offered us a 12-month supply contract with four possible combinations involving two different options. The first option is for us to be able to return unsold inventory at the end of the contract if we agree to pay a higher price per smart pen. The second option is for SmartTech to pay us H\$80,000 if we reduce selling prices to our customers. I have drawn up a decision tree (Schedule 1 attached) to show these potential options with SmartTech.

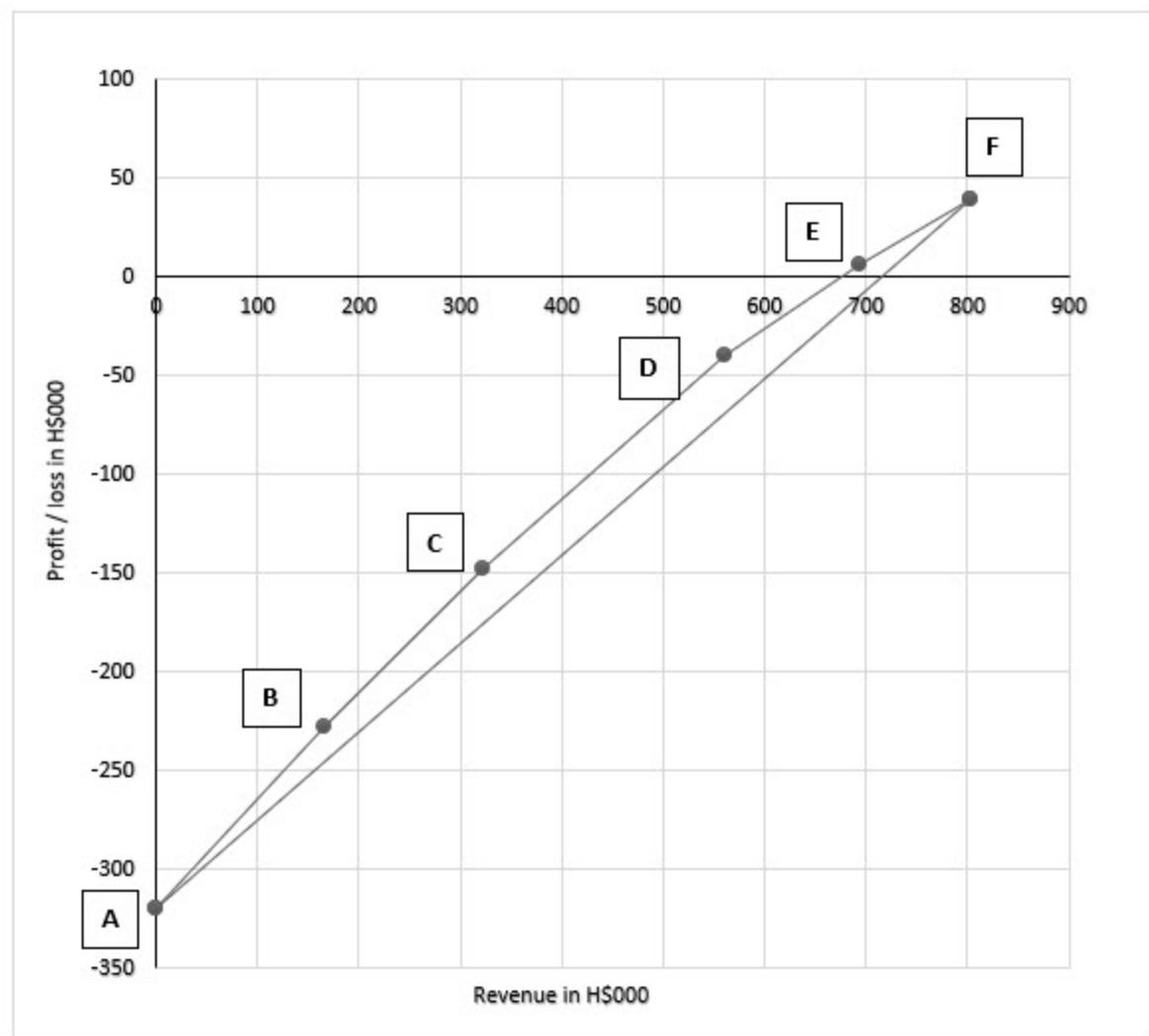
Please include in your briefing paper an explanation of:

- The decision tree and how it should be used to choose the combination of options for the SmartTech contract, using an expected value approach. Please also include one limitation of using this decision tree and one limitation of using an expected value approach to make this decision.  
**(sub-task (c) = 48%)**

Leo Lane  
Finance Manager  
BackOffice

The attachments to the email can be found by clicking on the Reference Material button above.

**Chart 1: Multi-product profit-volume chart for the accessories range for the first 4 months**

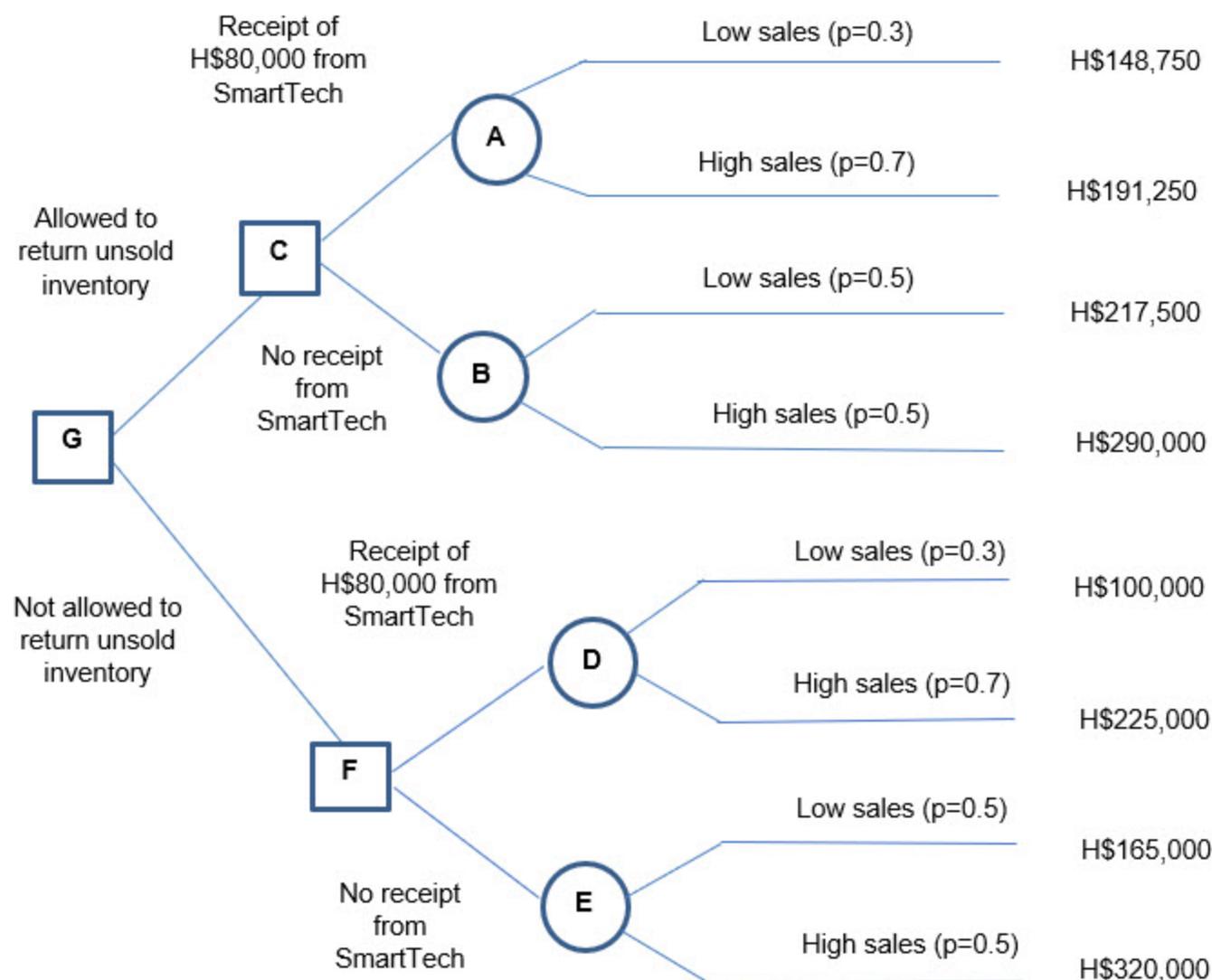


**Notes:**

- The fixed costs shown on the chart are the additional fixed costs arising as a result of the accessories range, including marketing costs.
- The budgeted c/s ratios are as follows:

	<b>c/s ratio</b>
Speakers	0.56
Smart pens	0.52
Lights	0.45
Cameras	0.35
Alarms	0.30
<b>Weighted average</b>	<b>0.45</b>

## Chart 1 Schedule 1

**Schedule 1: Decision tree of the options for the SmartTech contract****Profit before any receipt from SmartTech****Notes:**

- The profit in the right-hand column is the profit (before any receipt from SmartTech) that would be earned from the sale of smart pens over the 12 months.
- The expected values (before any receipt from SmartTech) are:
  - Point A = H\$178,500.
  - Point B = H\$253,750.
  - Point D = H\$187,500.
  - Point E = H\$242,500.

Reference Material

Pre-seen

Write the briefing paper requested by Leo Lane in the box below.

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Reference Material

Pre-seen

A few weeks later, Leo Lane, Finance Manager, calls you and says:

"Our first four retail stores will be opening as planned on 1 March 2025. Table 1 (which I will send you shortly) includes the expenditure in relation to Store 1.

Please prepare a briefing paper for the Senior Management Team (SMT) which explains:

- How the different items of expenditure in Table 1 will affect our financial statements for the year ending 30 June 2025.

**(sub-task (a) = 36%)**

We will shortly be placing our first orders with our accessory suppliers. Given that this is the first time we will be purchasing goods for resale rather than raw materials, the SMT is keen to understand how these goods will be measured in the financial statements. Included in Table 2, which I will also send you shortly, is some information about alarms, one of the accessories that we will be selling.

Please include in your briefing paper an explanation of:

- How the accessories inventory will be measured in our financial statements, with reference to the measurement rule in the relevant financial reporting standard and the information in Table 2.

**(sub-task (b) = 28%)**

To incentivise our retail store employees, Gem Rossi, Sales & Marketing Director, is keen to introduce a bonus scheme based on store and individual employee performance. As part of this, she has asked for suggestions of appropriate key performance indicators (KPIs).

Please include in your briefing paper suggestions of:

- Three KPIs that would be appropriate to monitor the performance of retail store employees at either a store or individual level. For each KPI, please explain how it would be measured and justify why it would be appropriate."

**(sub-task (c) = 36%)**

Leo then sends you Table 1 and Table 2, which can be found by clicking on the Reference Material button above.

**Table 1: Expenditure for Store 1**

Item	Explanation	H\$
Electronic point of sale equipment	The electronic point of sale equipment will record sales and process payments from customers. The expenditure of H\$55,000 includes H\$3,300 for import duties, H\$5,000 for installation and testing and H\$1,200 for training retail employees to use the equipment. The equipment was delivered on 1 February and is in the process of being installed. Testing will be completed at the end of the day on 28 February 2025. The equipment has a useful life of 5 years, but we expect to replace the equipment after 3 years.	55,000
Security system	The security system includes cameras and monitoring equipment. The system is being supplied by a single supplier at a total cost of H\$72,000. The system is expected to last for 10 years, although the cameras will be replaced every 2 years. The security system will be installed and fully operational from 1 March 2025.	72,000
Promotion	Promotional campaign specific to Store 1.	26,000

**Table 2: Information about alarms**

	<b>Notes</b>	<b>Per alarm H\$</b>
Full purchase cost		7.00
Discount for bulk purchase	1	0.40
Delivery cost for goods in		0.30
Re-packaging costs	2	0.60
Storage cost		0.35
Retail selling price	3	11.00
Packaging for despatch to website customer		0.50
Delivery to website customer		0.80

**Notes:**

1. We expect to purchase alarms in bulk from the supplier.
2. Re-packaging will be required to include each alarm in BackOffice branded packaging. This will be undertaken upon receipt of the goods into inventory. The costs include direct labour and packaging costs.
3. We expect that, periodically, the supplier will release a new model of this alarm, at which point any alarms still held in inventory will be sold off at 50% of the retail selling price.

Reference Material

Pre-seen

Write the briefing paper requested by Leo Lane in the box below.

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Reference Material

Pre-seen

It is now May 2025 and you receive the following email:

**From:** Leo Lane, Finance Manager  
**To:** Finance Officer  
**Subject:** Sales variances and retail service costs

The stores have now been open for over 2 months and the Senior Management Team (SMT) has asked for a report on the sales performance for the Office range of backpacks in the first 2 months of trading in the two largest stores: Store 1 and Store 2. Schedule 1 (attached) includes the sales variances for both stores, together with some notes.

Please prepare a report to the SMT which explains:

- What the variances shown in Schedule 1 for Store 1 and Store 2 mean, giving possible reasons why the variances have occurred.

**(sub-task (a) = 48%)**

At a recent SMT meeting, it was suggested that it would be useful to understand more about the cost per sales transaction of the retail service provided in our stores. Schedule 2 (attached) includes information about the retail sales service in the stores.

Please include in your report an explanation of, based on the information in Schedule 2:

- The direct and indirect costs per sales transaction of the retail service provided in our stores, including the difficulties we would face when determining these direct and indirect costs per sales transaction.

**(sub-task (b) = 52%)**

Leo Lane  
Finance Manager  
BackOffice

The attachments to the email can be found by clicking on the Reference Material button above.

**Schedule 1: Sales variances for Store 1 and Store 2 for the first 2 months of trading****Store 1:**

	Uffico H\$	Capsula H\$	Scrivania H\$	Total H\$
Sales price	1,000 F	8,400 A	1,900 A	9,300 A
Sales mix profit	16,192 F	11,375 A	1,016 A	3,801 F
Sales quantity profit				Nil

**Store 2:**

	Uffico H\$	Capsula H\$	Scrivania H\$	Total H\$
Sales price	3,100 A	7,650 A	1,450 A	12,200 A
Sales mix profit	7,319 A	8,493 A	11,415 F	4,397 A
Sales quantity profit				18,730 A

**Notes:**

- Budgeted sales volume and sales mix have been set as the same for both stores.
- Standards for average selling price and average profit per backpack range are also the same for each store and represent expected averages across the year. Uffico is the highest-priced range and Scrivania the lowest-priced range.
- The sales mix profit and sales quantity profit variances have been calculated using the individual units method.
- Both stores are in Hland's capital city. Store 1 is located in an area close to offices and Store 2 near a large university.
- In the first month of trading, a special promotional discount was offered on all backpacks in all stores. This is not reflected in the standard.
- In March 2025, the influencer, Jon Ford, posted a photograph of himself using a Scrivania backpack. Jon is a student in Hland and has over 2 million followers on social media.
- In April 2025, Bee Lloyd, a famous entrepreneur and TV personality, endorsed a limited-edition special design of our Uffico backpack and made an appearance at Store 1 to promote this. This design was available in Store 1 during April but is not yet available in Store 2. This design is being sold at a higher price than other Uffico backpacks.

**Schedule 2: Information about retail service in store**

<b>Retail service</b>	<b>Information</b>
Demonstration of backpacks and accessories	Retail employees are trained to demonstrate and explain the features of each type of backpack and smart accessory. All of the accessories can be attached to one of our backpacks with specially-adapted clips that are included as part of the accessory purchase.
Purchase completion	Purchase completion involves the customer paying for their purchase (by cash or electronic card machine readers). All items purchased are placed in a single BackOffice branded carrier bag made from recycled paper. A complementary notebook and pen are included with every transaction.

**Note:**

- As well as dealing with potential and actual customers, retail employees will also be involved with unloading and organising deliveries into store and restocking the store displays from inventory in the storeroom.

Reference Material

Pre-seen

Write the report requested by Leo Lane in the box below.

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Thank you for completing the Operational Case Study Exam.

Before you leave, don't forget to collect your printed confirmation of attendance.

Please click the End Exam (E) button before leaving the testing room quietly.



## Operational Case Study Exam

Maximum Time Allowed: 3 Hours

Welcome, Candidate Name

If this is not your name, please let your administrator know.

Click **Next** to start the test.

This examination is structured as follows:

Section number	Time for section (minutes)	Number of tasks	Number of sub-task/s	% time to spend on each sub-task
1	45	1	3	(a) 44% (b) 24% (c) 32%
2	45	1	2	(a) 44% (b) 56%
3	45	1	3	(a) 24% (b) 32% (c) 44%
4	45	1	2	(a) 64% (b) 36%

Each section (task) has a number of sub-tasks. An indication of how much of the time available for the section that you should allocate to planning and writing your answer is shown against each sub-task in the text of the question (and summarised in the table above).

This information will be available for you to access during the examination by clicking on the pre-seen button.

Reference Material

Pre-seen

Today is 1 December 2024. The Research & Development Department of BackOffice has been working on a new range of cabin bags. There will be two models in the range to start with and each is designed to meet cabin bag size requirements for most airlines. The new range will be launched to the market on 1 February 2025 and will initially be available for sale in Hland only, through retailers and the company website. Significant investment in equipment and working capital will be undertaken in respect of the new range and more direct and indirect employees recruited. There are no plans to increase the size of the Production Facility itself.

You receive the following email:

**From:** Leo Lane, Finance Manager  
**To:** Finance Officer  
**Subject:** Time series, budgets and working capital

We need to determine a sales forecast for our new cabin bag range. I have obtained industry information about sales of cabin bags in Hland since 2018 and have prepared some time series analysis on this. Schedule 1 (attached) includes the results of this.

Please prepare a briefing paper for the Senior Management Team (SMT) which explains:

- What the time series information in Schedule 1 indicates about demand for cabin bags in Hland over the period of the time series and whether this information is useful for determining forecast sales of our cabin bags for the period February to June 2025.  
**(sub-task (a) = 44%)**

Introducing the new range will obviously increase sales but is also going to have a significant impact on our cost base and cash flow. In the past, we have not revised our budgets once they have been set. However, Hilary Sec, Finance Director, has said that we will be revising our budgets for the year ending 30 June 2025 to incorporate the changes arising from the introduction of the new range. We expect though that there might be some resistance to revising the budget from some of the SMT members.

Please include in your briefing paper an explanation of:

- Why it is important for planning and control purposes to revise our budgets for the year ending 30 June 2025 to include the impact of the new range.  
**(sub-task (b) = 24%)**

The new range of cabin bags will require an investment in working capital. We will be using a number of new suppliers as the fabric used in the bags and the components required are different to those used in our backpack ranges. These suppliers are offering prompt payment discounts and bulk purchase discounts.

Please include in your briefing paper an explanation of:

- The impact of taking both types of discount from our suppliers on our investment in working capital for the new range of cabin bags. Please also explain the non-financial and other financial issues that we need to consider when deciding whether to take advantage of these discounts.  
**(sub-task (c) = 32%)**

Leo Lane  
Finance Manager  
BackOffice

The attachment to the email can be found by clicking on the Reference Material button above.

**Schedule 1: Time series information for sales of cabin bags in Hland****Trend line**

$$Y = 151,600 + 5,450Q$$

where  $Q = 1$  is the first quarter of 2018 (January to March)

**Seasonal variations**

January – March	-12,700
April – June	+8,100
July – September	+3,400
October – December	+1,200

**Notes:**

- The trend line and seasonal variations are based on quarterly sales of cabin bags in Hland from early 2018 until the end of 2023.
- During the period covered by this time series, most airlines have changed their pricing strategies to encourage passengers to use carry-on cabin bags rather than hold bags.

Reference Material

Pre-seen

Write the briefing paper requested by Leo Lane in the box below.

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[Reference Material](#)[Pre-seen](#)

It is now 6 January 2025. The Production Facility is in the process of being re-organised and new equipment installed ready to start production of the new cabin bag range.

Leo Lane, Finance Manager, calls you and says:

"We have leased an additional laser cutting machine, details of which are included in Table 1, which I'll send you shortly.

Please prepare a briefing paper to the Senior Management Team (SMT) which explains:

- How the lease for the laser cutting machine, as detailed in Table 1, will be initially recorded and then subsequently measured in our financial statements for the year ending 30 June 2025.

**(sub-task (a) = 44%)**

Given the introduction of the new range, it has been suggested that we review how we cost our products and consider the use of activity based costing (ABC). Schedule 1, which I will give you shortly, includes information about the production processes in the Cutting Department and some differences between backpack and cabin bag production.

Please include in your briefing paper an explanation of:

- How an ABC approach would differ to our current costing approach for the Cutting Department. Please illustrate your explanation with examples of costs and cost drivers for each of the three processes in Schedule 1."

**(sub-task (b) = 56%)**

Leo sends you Table 1 and Schedule 1, which can be found by clicking on the Reference Material button above.

## Table 1 Schedule 1

**Table 1: Lease for the laser cutting machine**

Lease arrangement fee paid on commencement of the lease on 1 January 2025	H\$2,500
Lease payments, payable in arrears on 31 December each year, starting on 31 December 2025	4 annual payments of H\$60,000
Residual value guarantee amount	H\$40,000
Interest rate implicit in the lease	9%
Lease term	4 years
Useful life of the laser cutting machine	6 years
Ownership of the laser cutting machine at the end of the lease term	Lessor

**Notes:**

- It is expected that the value of the laser cutting machine at the end of the lease term will be H\$25,000.
- The laser cutting machine was installed on 1 January 2025 and was available for use on that date, although won't start to be used until 1 February 2025.

## Table 1 Schedule 1

**Schedule 1: Information about processes in the Cutting Department**

**Moving:** The rolls of fabric needed for that day's production are moved from stores into the Cutting Department throughout the day by forklift truck. Each delivery includes four rolls of fabric which will be for two specific batches of production. The forklift truck is also used for other activities in the stores.



**Laser cutting:** The fabric rolls are loaded into the laser cutting machine where the required pieces are cut out by laser. The laser cutting machine has to be reset when the model changes.



**Edging:** After cutting, some of the larger fabric pieces are taken to an edging machine, where the worker edges the piece using the machine. Edging takes the same amount of time for each piece that has to be edged. Other pieces are left unedged.

	<b>Cabin bags</b>	<b>Backpacks</b>
Number of units in a production batch	10	20
Number of fabric rolls required per batch	2	2
Number of fabric pieces cut per unit	40	120
Number of fabric pieces requiring edging per unit	30	40
Direct labour hours per batch	4 hours	10 hours

Reference Material

Pre-seen

Write the briefing paper requested by Leo Lane in the box below.

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Reference Material

Pre-seen

It is now April 2025 and production of the cabin bags started at the end of January 2025. There are currently two models in the range, referred to internally as CB1 and CB2.

You receive the following email:

**From:** Leo Lane, Finance Manager  
**To:** Finance Officer  
**Subject:** Damaged sewing machine, replacement machinery and production constraints

In order to produce cabin bags, we adjusted some of our sewing machinery to work exclusively on the range. One of these sewing machines was damaged on 1 April 2025 when it had a carrying amount of H\$35,600. The damage is significant and means the machine is now out of action. We could repair it at a considerable cost, but Jack Loren, Production Director, has suggested that replacement machinery be found instead with bigger capacity, and the Senior Management Team (SMT) has agreed to this. The damaged machine will be kept in storage for spare parts, which would potentially save us H\$14,000 in future repair costs (in present value terms). Based on its current condition, we could sell the machine for H\$12,500, but would incur selling costs of H\$1,000.

Please prepare a briefing paper for the SMT which explains:

- How to account for the damaged sewing machine in our financial statements for the year ending 30 June 2025.

**(sub-task (a) = 24%)**

Jack has suggested that the replacement machinery should be hired for a period of 6 months and three different suppliers have been shortlisted. Each supplier has a different fee structure based on machine usage. Because of the uncertainty regarding the level of demand for cabin bags, I have prepared Schedule 1 which includes a payoff table and regret table.

Please include in your briefing paper an explanation of:

- The maximax, maximin and minimax regret decision criteria and how each of these can be applied to the information in Schedule 1 to decide which supplier to choose. Please state which supplier would be chosen for each criterion.

**(sub-task (b) = 32%)**

The replacement sewing machinery will take a month to be installed and therefore Jack has identified that there is a potential constraint of sewing machine hours for cabin bag production. In addition, Jack has also told me that there is a potential shortage of one of the specialist fabrics used in cabin bags. As a result, I have drawn up a linear programming graph (Graph 1, attached). Jack has said that additional specialist fabric could be sourced, but at a cost of H\$5.50 more per square metre than our usual cost and has said that this is financially beneficial.

Please include in your briefing paper an explanation of:

- Graph 1 and how to verify that where lines A and B intersect is the optimal solution. Please also explain why it is financially beneficial to order additional fabric at the higher price and how to determine, based on Graph 1, how much additional specialist fabric we would order.

**(sub-task (c) = 44%)**

Leo Lane  
Finance Manager  
BackOffice

The attachments to the email can be found by clicking on the Reference Material button above.

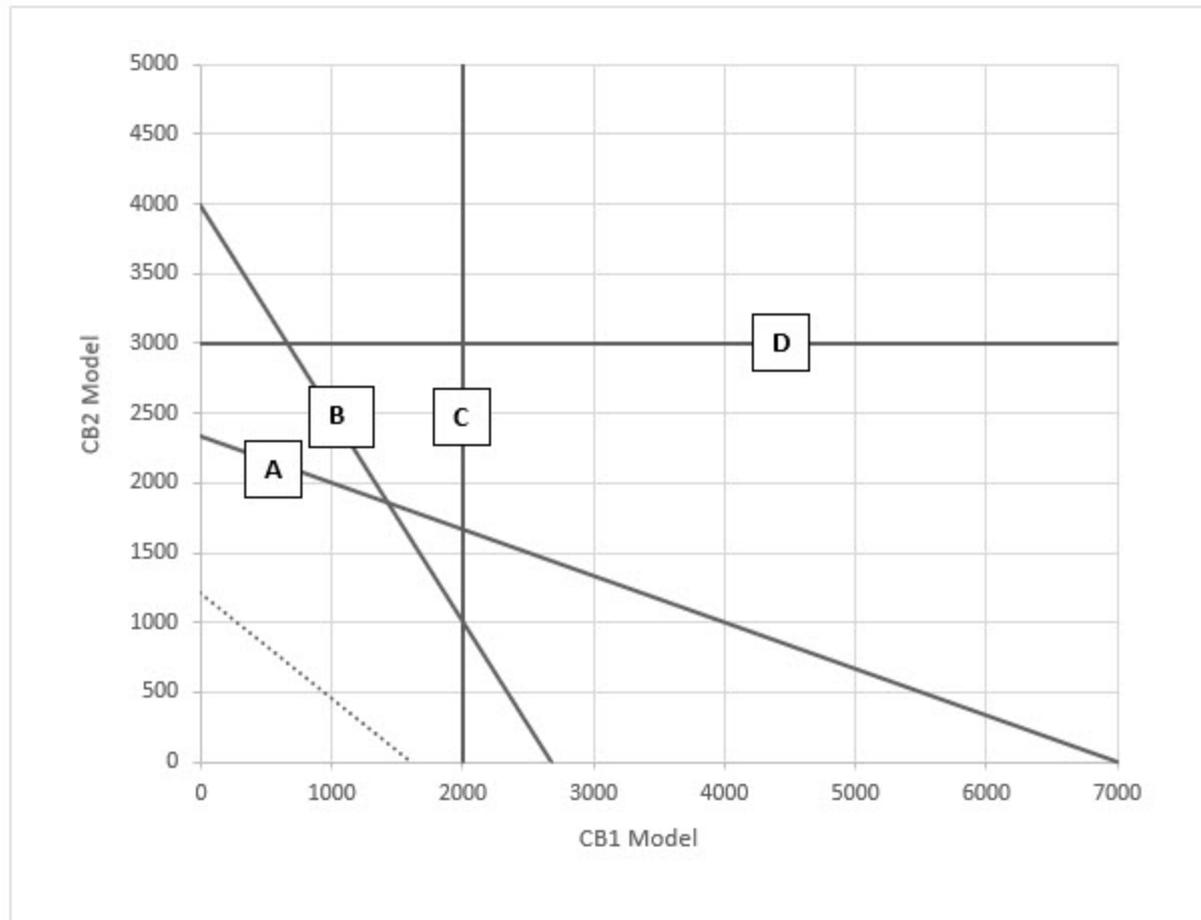
**Schedule 1: Alternative suppliers for machinery hire**

Payoff table showing expected 6-month profit generated from cabin bag sales after machinery hire costs

Demand for Cabin Bags	Supplier 1 H\$	Supplier 2 H\$	Supplier 3 H\$
Low	1,455,000	1,442,000	1,420,000
Medium	2,425,000	2,430,000	2,420,000
High	3,880,000	3,912,000	3,920,000

Regret table based on payoff table

Demand for Cabin Bags	Supplier 1 H\$	Supplier 2 H\$	Supplier 3 H\$
Low	0	13,000	35,000
Medium	5,000	0	10,000
High	40,000	8,000	0

**Graph 1: Linear programming graph****Key to the graph:**

- Lines A and B are the constraint lines for the specialist fabric and sewing machine hours, respectively, for the month.
- Lines C and D represent the number of CB1 and CB2 models that we need to produce to meet demand in the month. These represent maximum constraints.
- The dotted line is an iso-contribution line.

**The optimal production plan based on the above graph:**

- The optimal production plan appears to be where lines A and B intersect.
- At this point, the shadow price for fabric is H\$6.43.

Reference Material

Pre-seen

Write the briefing paper requested by Leo Lane in the box below.

Rich text editor toolbar with icons for: Undo, Redo, Bold, Italic, Underline, Strikethrough, Subscript, Superscript, Text Color, Paragraph, Table, Bulleted List, Numbered List, Indent Left, Indent Right, Decrease Indent, Increase Indent.

Reference Material

Pre-seen

It is now July 2025 and you receive the following email:

**From:** Leo Lane, Finance Manager  
**To:** Finance Officer  
**Subject:** Performance of the Cutting Department

The Senior Management Team (SMT) has requested a report on the performance of the Cutting Department for the quarter April to June. Attached are the production variances that are above H\$10,000 for the department (Table 1) and some of the Key Performance Indicator (KPI) measures for the period (Table 2). I have been told that:

- There was disruption in April as a result of damage to machinery and a delay before new machinery could be installed.
- In March and April, partly as a result of changing some of the working processes in the department, we had a higher level of direct employees leaving than usual. We recruited new direct employees to fill these roles as well as additional direct employees to increase the total number in the department. Many of these new employees were inexperienced and were trained on the job. We also recruited an additional supervisor.
- As a result of issues with availability and quality for some of our fabrics, some suppliers were changed in April and May. Consequently, we lost bulk discounts but did receive introductory trade discounts from some of the new suppliers. These discounts have ceased with effect from 1 July 2025.

Please prepare a report for the SMT which explains:

- What each of the variances shown in Table 1 means and possible reasons for their occurrence, based on the information above.  
**(sub-task (a) = 64%)**
- Why each of the KPIs in Table 2 are suitable for measuring the performance of the Cutting Department and what these measures indicate about performance of the department over the period.  
**(sub-task (b) = 36%)**

Leo Lane

The attachment to the email can be found by clicking on the Reference Material button above.

**Table 1: Variances for the Cutting Department for April – June 2025**

Variance	H\$	
Raw materials price	31,500	Favourable
Raw materials usage	50,400	Adverse
Direct labour rate	14,000	Favourable
Direct labour idle time	10,800	Adverse
Direct labour efficiency	39,800	Adverse
Fixed overhead expenditure	13,400	Adverse
Fixed overhead efficiency	21,112	Adverse
Fixed overhead capacity	30,160	Favourable

**Notes:**

- Raw materials here are the fabrics used in production.
- Idle time is not budgeted for.
- Fixed production overhead is absorbed on the basis of direct labour hours.
- The original budget for the period was revised in January 2025 to show the impact of the new range of cabin bags.
- For the period, the budgeted level of production was 40,000 bags and 42,000 bags were actually produced.

**Table 2: KPIs for the Cutting Department for April – June 2025**

KPI	Target	April	May	June
% of fabric scrapped	5%	10%	8%	4%
% of scrapped fabric sent for recycling	95%	90%	70%	85%
% of direct employees retained	95%	80%	85%	100%

Reference Material

Pre-seen

Write the report requested by Leo Lane in the box below.

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Thank you for completing the Operational Case Study Exam.

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## Operational Case Study Exam

Maximum Time Allowed: 3 Hours

Welcome, Candidate Name

If this is not your name, please let your administrator know.

Click **Next** to start the test.

This examination is structured as follows:

Section number	Time for section (minutes)	Number of tasks	Number of sub-task/s	% time to spend on each sub-task
1	45	1	2	(a) 44% (b) 56%
2	45	1	3	(a) 28% (b) 24% (c) 48%
3	45	1	3	(a) 36% (b) 32% (c) 32%
4	45	1	3	(a) 40% (b) 24% (c) 36%

Each section (task) has a number of sub-tasks. An indication of how much of the time available for the section that you should allocate to planning and writing your answer is shown against each sub-task in the text of the question (and summarised in the table above).

This information will be available for you to access during the examination by clicking on the pre-seen button.

Reference Material

Pre-seen

Today is 1 December 2024. The Senior Management Team (SMT) has decided to start selling backpacks in Byland, a large country in the Americas. As a result, the Production Facility has been working at full capacity to build inventory ahead of starting to sell in Byland in early 2025.

You receive the following email:

**From:** Leo Lane, Finance Manager  
**To:** Finance Officer  
**Subject:** Production overhead variances and digital costing system

Given how busy we are, the SMT has asked for a report on the production overhead variances for the Production Facility for November. Attached in Table 1 are the relevant variances, together with some notes.

Please prepare a report for the SMT which explains:

- What each of the variances in Table 1 means and possible reasons for their occurrence.

**(sub-task (a) = 44%)**

Jack Loren, Production Director, has been reading about digital costing systems. Given the number of new product ranges in the pipeline, he believes that investing in integrated internal systems and automated external links as part of a digital costing system could be beneficial. He has sent me Table 2 (attached) which includes data about our current and future position (in one year), as well as some industry information about companies in the textile industry that are already using digital costing systems.

Please include in your report an explanation of:

- The potential benefits to our business of integrated internal systems and automated external links if we implemented a digital costing system. Please use the information in Table 2 to support your explanation.

**(sub-task (b) = 56%)**

Leo Lane  
Finance Manager  
BackOffice

The attachments to the email can be found by clicking on the Reference Material button above.

**Table 1: Production overhead variances for the Production Facility for November 2024**

	<b>Variable overhead H\$</b>	<b>Fixed overhead H\$</b>
Expenditure	3,584 adverse	21,600 adverse
Efficiency	2,138 adverse	6,395 adverse
Capacity	Not applicable	19,812 favourable

**Notes:**

- Production overheads are absorbed on the basis of direct labour hours.
- In November, budgeted production of backpacks was 9,000 units and actual production was 10,500 units.
- Additional direct employees and supervisors were employed at the end of October. Significant unplanned overtime was also worked during November.
- A new on-site wind turbine was connected in early November, which means that all power used at the Production Facility is now generated from either solar or wind power. The impact of this wind turbine was not reflected in the budget when it was set. The electricity expense has fallen as a result of the new wind turbine.
- Additional equipment was rented in November.

**Table 2: Data about BackOffice versus industry average for digital costing systems**

	No digital costing system		Digital costing system
	BackOffice current	BackOffice in 1 year	Industry average
Number of individual products*	52	112	620
Number of retailers selling to	108	192	250
Number of suppliers	62	103	182
Average supplier lead time	12 days	16 days	2 days
Average textile waste	4%	4%	2%
Average labour idle time (% of total labour time)	5%	5%	1%

\*An individual product is a specific style and colour of a textile item.

**Note:**

- A digital costing system would have fully integrated links between internal systems as well as automated external links to suppliers, customers and the internet. Currently, BackOffice's internal systems (sales, purchasing, product design and production) are not linked and there are no automated links to suppliers or retailers.

Reference Material

Pre-seen

Write the report requested by Leo Lane in the box below.

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Reference Material

Pre-seen

A week later, Leo Lane, Finance Manager, calls you and says:

“Gem Rossi, Sales & Marketing Director, has informed me that she has been in negotiations with two retailers in Byland (GlamHouse and PW Finns) to stock and sell our backpacks. When she next speaks to these two retailers, she would like to be able to discuss credit limits with them. Table 1 (which I will give you shortly) has some limited information about these two retailers.

I would like you to prepare a briefing paper which explains:

- The factors we should consider when determining credit limits for retailers, with reference to the information in Table 1. **(sub-task (a) = 28%)**
- Any other information that would be helpful when assessing the creditworthiness of GlamHouse and PW Finns. **(sub-task (b) = 24%)**

I have also been reviewing the latest aged receivables report with Hilary Sec, Finance Director. Hilary is a little concerned that the amounts overdue seem to be increasing and, given that the number of retailers is going to grow considerably, she has suggested that we recruit a specialist credit controller. This person would be responsible for raising invoices, dealing with queries on invoices and chasing for payment. They will also be involved in assessing the creditworthiness of new retailers.

Please also include in your briefing paper:

- Suggestions of four KPIs that are appropriate to monitor the performance of the new credit controller. Please explain how each KPI would be measured and justify why it would be appropriate.” **(sub-task (c) = 48%)**

Leo Lane gives you Table 1, which can be found by clicking on the Reference Material button above.

**Table 1: Information about potential retailers in Byland**

	<b>GlamHouse</b>	<b>PW Finns</b>
Type of retail chain	Department store	Bag store
Number of stores	150	32
Inventory days	148 days	72 days
Trade payable days	92 days	68 days

Reference Material

Pre-seen

Write the briefing paper requested by Leo Lane in the box below.

Rich text editor toolbar with icons for: Undo, Redo, Bold, Italic, Underline, Strikethrough, Subscript, Superscript, Text Color, Paragraph, Table, Bulleted List, Numbered List, Indent Left, Indent Right, Decrease Indent, Increase Indent.

Reference Material

Pre-seen

It is now February 2025. Sales in Byland are better than originally expected and a few weeks ago, the Senior Management Team (SMT) decided to set up a small distribution centre in Byland. This will be operational from 1 March 2025.

You receive the following email:

**From:** Leo Lane, Finance Manager  
**To:** Finance Officer  
**Subject:** Activity based budgeting and sensitivity analysis

The new Byland Distribution Centre will hold an inventory of backpacks and it is from here that sales orders from retailers in Byland will be despatched. Hilary Sec, Finance Director, would like to use activity based budgeting (ABB) in the business and would like to trial its use to create the budget for the Byland Distribution Centre, starting with the budget for employee costs. Schedule 1 (attached) includes some information about how the Byland Distribution Centre will operate.

Please prepare a briefing paper for the SMT which explains:

- How the employee cost budget for the Byland Distribution Centre will be established using an ABB approach. **(sub-task (a) = 36%)**
- Two potential difficulties and two potential benefits of using ABB to establish the employee costs budget for the Byland Distribution Centre. **(sub-task (b) = 32%)**

We did prepare an initial budget for the new Byland operation for the 4 months to 30 June 2025 to help the SMT decide whether to go ahead with the new Distribution Centre. Obviously, many of the operating costs for the centre are still to be confirmed and there is uncertainty over final sales prices and the levels of discounts that will be offered to retailers in the Byland market. Included in Schedule 2 (attached) is the initial budget and sensitivity measures calculated to show the sensitivity of profit to independent changes in each budget item.

Please include in your briefing paper an explanation of:

- What sensitivity means in this context and what the information shown in Schedule 2 indicates about the most and least sensitive measures. Please also explain why the level of sensitivity differs for different budget items. **(sub-task (c) = 32%)**

Leo Lane  
Finance Manager  
BackOffice

The attachments to the email can be found by clicking on the Reference Material button above.

**Schedule 1: Information on the operation of the Byland Distribution Centre**

Activity	Detail
Moving goods into inventory	<p>Backpacks will be transported to Byland by ship and will be delivered to the Distribution Centre by road in small shipping containers.</p> <p>Each container will include 20 pallets of backpacks. Each pallet will be removed from the container by forklift truck operated by our own employees into a holding area where the employee will check the goods received against the internal order.</p> <p>Each pallet will contain 100 backpacks in their presentation boxes. Most pallets will include 10 different types of backpack (where a type is a particular style and colour). Each pallet will be moved around the stores area by forklift truck. The employee will keep stopping the forklift truck to manually unload boxes and place these on the appropriate shelf for that style and colour of backpack.</p>
Picking goods for despatch	<p>Orders from retailers are expected to be for around 80 to 100 backpacks at a time and therefore one order will be picked at a time onto a pallet.</p> <p>The employee will load an empty pallet onto a forklift truck and then move around the stores area picking the backpacks required for that order. It is expected that there could be between 5 and 20 different types of backpack in each order. After the backpacks are picked, the employee will move the forklift truck to the packing area.</p>

**Schedule 2: Initial budget and sensitivity analysis****Initial budget for the Byland operation for the 4 months to 30 June 2025**

	<b>H\$</b>
Revenue	2,062,500
Cost of goods sold*	(1,000,000)
<b>Contribution of Byland operation</b>	<b>1,062,500</b>
Operating costs of Distribution Centre**	(280,000)
Marketing costs	(700,000)
<b>Profit</b>	<b>82,500</b>

\*Cost of goods sold is the standard cost of backpacks and is treated as a variable cost for the purpose of this analysis.

\*\*The operating costs of the Byland Distribution Centre are treated as fixed costs for the purpose of this analysis.

**Sensitivities based on the initial budget for the Byland operation**

<b>Budget item</b>	<b>Sensitivity</b>
Selling price	4.0%
Sales volume	7.8%
Cost of goods sold per unit	8.3%
Operating costs	29.5%
Marketing costs	11.8%

Reference Material

Pre-seen

Write the briefing paper requested by Leo Lane in the box below.

Rich text editor toolbar with icons for: Undo, Redo, Bold, Italic, Underline, Strikethrough, Subscript, Superscript, Text Color, Paragraph, Table, Bulleted List, Numbered List, Indent Left, Indent Right, Decrease Indent, Increase Indent.

Reference Material

Pre-seen

It is now May 2025. Following the success of the launch of BackOffice in Byland, the Senior Management Team (SMT) has decided to launch in other countries in the Americas. As a result, the Production Facility is in the process of being expanded to increase its capacity.

You receive the following email:

**From:** Leo Lane, Finance Manager  
**To:** Finance Officer  
**Subject:** Old equipment and promotional campaign

As part of the expansion of the Production Facility, we have replaced one of our laser cutting machines and are now looking to sell the old machine. One of our sewing machines has also been damaged as a result of being relocated. Details of both machines are included in Table 1 (attached).

Please prepare a briefing paper for the SMT which explains, with appropriate justification:

- How the laser cutting machine detailed in Table 1 will be classified and measured in our financial statements for the year ending 30 June 2025.  
**(sub-task (a) = 40%)**
- How the sewing machine detailed in Table 1 will be measured in our financial statements for the year ending 30 June 2025.  
**(sub-task (b) = 24%)**

We will soon be launching our website shop in Byland, so that customers can purchase our backpacks direct from us. The Byland Sales Manager has suggested that as a special launch promotion, customers are able to buy a luxury reusable water bottle with each backpack purchased. These bottles will only be available to purchase for a limited time and will be sold for a special low price. The water bottle supplier is offering three different order levels at different costs per unit. If we need additional bottles, these can be purchased at short notice from the supplier at a higher cost per unit. Any bottles that we do not use can be sold back to the supplier, but at a significant discount. We are not sure how many bottles we will sell but we need to decide on the order level now. Table 2 (attached) includes a payoff table of profits from the sale of bottles and associated statistics.

Please include in your briefing paper an explanation of:

- How to decide the order size using a risk seeking, risk neutral and risk averse approach, in each case giving the order size chosen. Please include one limitation of each decision approach.  
**(sub-task (c) = 36%)**

Leo Lane  
Finance Manager  
BackOffice

The attachments to the email can be found by clicking on the Reference Material button above.

**Table 1: Information about machines**

Machine	Information
Laser cutting machine	<ul style="list-style-type: none"><li>• The laser cutting machine ceased to be used on 1 May 2025 when it had a carrying amount of H\$41,200. Its depreciation charge is H\$820 a month.</li><li>• The machine needs to be inspected and have a new safety certificate before it can be put up for sale. We expect to have the safety certificate at the end of May at a cost of H\$500.</li><li>• This is a specialist machine, and so a selling agent has been engaged. The agent has stated that they will start to market the machine on 1 June and expect to be able to sell the machine within 6 months at a price of around H\$35,000. The agent will charge us a fee of H\$4,000.</li></ul>
Sewing machine	<ul style="list-style-type: none"><li>• On 1 May 2025, the carrying amount of the sewing machine was H\$16,800 and, based on the original estimate, its remaining useful life was 3 years.</li><li>• The sewing machine was damaged on 1 May 2025.</li><li>• The damage was immediately repaired at a cost of H\$3,400. This repair has brought the asset back to its original operating capacity.</li><li>• It has been decided that, with effect from 1 May 2025, this sewing machine will be used for another 1.5 years and then replaced with a new machine. The expected sales value of the machine in 1.5 years is H\$5,600.</li></ul>

**Table 2: Payoff table profit from bottle sales**

Demand	Probability	Choice of order size		
		Option 1 H\$	Option 2 H\$	Option 3 H\$
Low	0.2	17,500	16,500	14,000
Moderate	0.5	13,500	52,500	50,000
High	0.3	8,500	47,500	95,000
<b>Expected value</b>		<b>12,800</b>	<b>43,800</b>	<b>56,300</b>
<b>Co-efficient of variation</b>		0.25	0.32	0.51

Reference Material

Pre-seen

Write the briefing paper requested by Leo Lane in the box below.

Rich text editor toolbar with icons for: Undo, Redo, Bold, Italic, Underline, Strikethrough, Subscript, Superscript, Text Color, Paragraph, Table, Bulleted List, Numbered List, Indent Left, Indent Right, Decrease Indent, Increase Indent.



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## OPERATIONAL CASE STUDY

### NOVEMBER 2024 & FEBRUARY 2025

### EXAM ANSWERS

#### Variant 1

*These answers have been provided by CIMA for information purposes only. The answers created are indicative of a response that could be given by a good candidate. They are not to be considered exhaustive, and other appropriate relevant responses would receive credit.*

*CIMA will not accept challenges to these answers on the basis of academic judgement.*

#### SECTION 1

##### **What the time series information tells us**

The trend line represents the demand for panniers in Veeland over a period of time (January 2019 to December 2022) after smoothing the data to remove seasonal variations. The first number in the equation represents the base level demand for panniers in Veeland. This means that when the information was compiled the base level of demand for panniers was 26,000 a quarter. The second part of the equation represents the trend since this base level. For each successive quarter, the trend is for an increase of 300 panniers. Therefore, in quarter 1, the trend for pannier sales in Veeland was = 26,300 (26,000 + 300), in quarter 2 = 26,600 (26,000 + (300 x 2)) and in quarter 3 = 26,900 (26,000 + (300 x 3)) and so on.

The seasonality information indicates how different times of the year affect demand for panniers in Veeland. That is to say how much demand was above or below the trend in each quarter. Seasonality has been calculated using the multiplicative model, which means that demand for panniers in Veeland is 50% higher than the trend in the quarter April to June and 30% lower than the trend for the quarter October to December. This seasonality indicates that fewer panniers are purchased in the winter when cycling is made less appealing due to poor weather conditions, and more are purchased in the summer when the opposite is generally true.

##### **Limitations of this information for forecasting sales of Cycle Backpacks**

The industry information obtained by Gem Rossi, Sales & Marketing Director, relates to cycle panniers and not cycle backpacks. While both products fulfil the same basic function, that of carrying and transporting various items while cycling, our Cycle Backpack will be focused on a much narrower market segment than the generic

panniers. Our Cycle Backpack is developed specifically for those that commute to work and incorporates space for a laptop and change of clothes. The cycle panniers in the time series information will include large panniers designed for more substantial outdoor ventures such as camping and touring as well as panniers with no capacity or function for office equipment. In addition, the time series information relates to cycle panniers which are not likely to be the premium brand, luxury items that BackOffice is renowned for. For these reasons, the trend and seasonal variation information is unlikely to be accurate enough to forecast demand for our product.

In addition to the differences with the product itself, the time series information is based in Veeland, whereas BackOffice usually sells its products in a much wider geographical market. This means that while there is reasonable growth in the Veeland market, this may not be the case in the rest of Europe or any other country we may choose to sell the Cycle Backpack. Furthermore, we do not know the impact that the launch of our competitor's cycle backpack will have on demand for our new product. The time series information has probably been derived from a completely different competitive environment. Therefore, it would be dangerous to extrapolate market conditions in Veeland to Hland and other locations in order to estimate likely demand for the Cycle Backpack.

By its nature, the information used to compile a time series is limited, as forecasts based on it rely on the assumption that historic data will continue into the future. This is unlikely to be true on all occasions. The most recent data used in this time series is 2 years old and may be considered out of date. Since December 2022, we have experienced a considerable increase in demand for our backpacks and this pattern may be true of cycle backpacks generally.

### **The choice of promotional company**

#### **Maximax**

Using a maximax approach to this decision, we would choose the promotional company that maximises the maximum payoff achievable for each promotional campaign. The maximax criterion is best suited to a decision maker that is optimistic. Using Table 1, the best contribution if we employ Company A is H\$372,000. If we employ Company B, the best contribution is H\$370,000 and if we employ Company C, the best contribution is H\$258,000. Of these, the best contribution gained and therefore best payoff is H\$372,000. As a result, under this criterion, we would choose Company A.

#### **Maximin**

Using a maximin approach to this decision, we would choose the promotional company that maximises the minimum contribution gained for each contract. In other words, we will choose the best of the worst outcomes. The maximin criterion is best suited to a decision maker that is pessimistic. The lowest contribution if we employ Company A is H\$22,000. If we employ Company B, the lowest contribution is H\$30,000 and if we employ Company C, the lowest contribution is H\$29,000. The

highest of these lowest contributions is H\$30,000, and therefore under this criterion, we would choose Company B.

### **Minimax regret**

Using a minimax regret approach, we would select the promotional company that minimises the maximum regret. This is used where we want to minimise the regret of making a bad decision. 'Regret' refers to the opportunity loss from having made the wrong decision. The decision maker that is attracted to this criterion is sometimes referred to as a "sore loser." Table 2 shows the regret of choosing a promotional company depending on the market reaction for the new Cycle Backpack. For example, if the market reaction towards the Cycle Backpack was poor, we would have no regret if we chose Company B, as this is the highest contribution for this market condition. The regret for selecting each of the other companies at this demand level is the contribution we would lose if we chose them instead of Company B. These regrets are H\$8,000 (H\$30,000 - H\$22,000) for Company A and H\$1,000 (H\$30,000 - H\$29,000) for Company C. The maximum regret is H\$8,000 for Company A, H\$2,000 for Company B, and H\$114,000 for Company C. To minimise maximum regret, we should therefore select Company B.

### **Non-financial considerations**

While it could be an advantage to use a promotional company that has an expertise in the cycling market, as we would get our new product introduced to customers that may never otherwise consider a BackOffice product, we must ensure that the launch campaign for this market is aligned with any other promotional initiative we take. While our products are designed to be practical, our brand is recognised as luxury rather than utilitarian, and it is important that there is no devaluation of the brand. Therefore, a major non-financial consideration would be how BackOffice's Sales & Marketing Department could communicate, control and work together with any promotional company chosen for this specific part of the Cycle Backpack launch.

Secondly, we must be sure that sensitive market information is not revealed to any of our competitors. We know that one of our direct competitors is planning to launch a cycling bag shortly and that this competitor is going to use a promotional company that specialises in cycling products. Therefore, we must be sure that information about our company does not get leaked. This would mean that we should focus on selecting a promotional company that can be trusted, one with sound ethical practices and procedures.

## SECTION 2

### **New sewing machines**

IAS 16: Property, plant and equipment states that the cost of an item of property, plant or equipment is made up of its purchase price and any costs that are directly attributable to bringing the asset to the location and condition required for its intended use. Applying this rule to the sewing machines, we can capitalise the purchase price of H\$90,000 and the H\$2,000 cost of installation (as this must all be incurred to make the machines operable). The training costs of H\$1,000 cannot be capitalised as, although they may lead to future economic benefit for our business, because the staff are free to leave BackOffice at any time, we cannot control this. We will therefore initially record the sewing machines in the statement of financial position at cost of H\$92,000 (H\$90,000 plus H\$2,000).

The sewing machines will be depreciated over their 10-year useful life from the date that the machines are available for use, which is after the training has been completed on 1 April 2025. Therefore, 3 months' depreciation will be charged to the statement of profit or loss. The amount reflected in the statement of financial position for the year ending 30 June 2025 will be the total cost recorded (H\$92,000) less 3 months' depreciation. If we assume that the sewing machines have no residual value, the 3 months' depreciation will be calculated as  $H\$92,000 \times 1/10 \times 3/12$ . The H\$1,000 training cost will also be charged to profit in the statement of profit or loss for the year ending 30 June 2025.

### **Corporate income tax payable**

As accounting depreciation is not allowable for corporate income tax purposes, when we calculate our taxable profit for the year, we add back the accounting depreciation we had deducted (see above) and deduct instead tax depreciation allowances.

Normally our tax depreciation allowances are 25% on a reducing balance basis, with a full year's allowance available in the year that the asset is acquired. However, these sewing machines have attracted special first-year allowances of 100%. This means that the full cost of the asset can be deducted in the first year.

The calculation of taxable profit for the year ending 30 June 2025 will include an add back for accounting depreciation of a small value ( $(H\$90,000 + H\$2,000) \times 1/10 \times 3/12$ ), assuming no residual value, and a deduction for the first-year tax depreciation allowance of the full cost of the asset at H\$92,000 (H\$90,000 + H\$2,000). This deduction will be larger than the deduction would be using the normal tax depreciation on  $H\$92,000 \times 25\%$ .

This will reduce taxable profit for the year ending 30 June 2025, compared to what it would have been without the first-year allowance. In turn, this means that both the tax charge and the amount of tax we will have to pay for this year will be lower than it would have been had we used normal tax depreciation.

In addition, the H\$1,000 training costs charged to the statement of profit or loss will also reduce taxable profit for the year ending 30 June 2025, resulting in a lower tax charge.

### **Working capital ratios**

#### **Inventory turnover**

This measures how many times the components inventory is converted into sales in the year. Supplier 1 is turning its inventory over almost every week, whereas Supplier 2 has been holding on to its inventory for 3 months. The difference is almost certainly due to Supplier 1 adopting a just in time (JIT) approach to its purchasing. Given this, there may be a higher risk that Supplier 1 is not able to access the components needed to repair our machines, although this will depend on the strength of the relationship that it has with its own suppliers.

#### **Receivables turnover**

This measures how many times credit sales are converted into cash in the year. Supplier 1 only converts receivables 6 times a year, indicating that its credit control function may be less effective than Supplier 2. This would mean that BackOffice would probably have longer to pay the repair and maintenance fees if Supplier 1 were chosen over Supplier 2. This is beneficial as it constitutes interest-free credit for BackOffice.

#### **Payables turnover**

This measures how many times credit purchases are converted into cash outflow in the year. Supplier 1 pays its suppliers much quicker than Supplier 2 does. This is possibly related to the fact that there is a close working relationship between buyers and sellers that employ JIT, and that Supplier 1 would not risk losing this close relationship by paying late.

#### **Current ratio**

This measures how much of the current assets are financed by current liabilities. Supplier 1 can pay its current liabilities 8 times over out of its current assets and Supplier 2 2.5 times over. Supplier 1 probably has a higher current ratio due to holding high receivables (see receivables turnover above) compared to its level of payables. It could be argued that Supplier 2 has the better ratio value as the cover is sufficient without being wasteful.

## SECTION 3

### Rolling budgets

#### **Rolling budgets and their potential benefits**

A rolling budget, also known as a continuous budget, is updated by adding a further accounting period, usually a month or quarter, when the earliest accounting period has expired.

A rolling budget approach should be more accurate than our usual incremental approach to budgeting, as it re-examines the assumptions used to compile the nearest budget periods. This is particularly useful for the launch of the Cycle Backpack and the other proposed new products, as we are unsure of demand and many of our assumptions could prove inaccurate post-launch. A rolling budget ensures that the budget period closest to the present is examined in the most detail while the latest month added to the budget has been recently reviewed. Therefore, the approach helps us to decide how to prepare and respond to uncertainty, which is important for the Cycle Backpack and the other new initiatives currently being considered by our company as the budgets would reflect the latest market expectations. This would mean that budgets would be more realistic and therefore better for comparison to actual results. Realistic budgets should facilitate better performance management and could also prove more motivational for managers as they would view the budgets as achievable and therefore fair.

A rolling budget process does not necessarily result in changes in the underlying assumptions that make up the budgets each month or quarter, but it does offer an opportunity for more frequent reviews. A rolling approach would offer additional opportunities to review the budget and, while the most emphasis would be on the closest periods, it would also ensure that we are aware of the prospects further ahead. This will be particularly important for the proposed Cycle Backpack market, which is possibly subject to more seasonal fluctuations than we are used to with our current ranges, which might need more resource planning than our existing ranges. Using a rolling budget approach will also allow the business to react more quickly to a change in the environment than the current annual process allows, which in turn might allow us to take advantage of opportunities quicker than our rivals.

Rolling budgets are particularly suited to planning cash flow, which needs to be reviewed regularly. We currently have almost as many proposed new product ranges as existing product ranges, which means, potentially, we face a high level of investment. This investment is likely to have a significant impact on our cash flow. Because of the improved accuracy a rolling budget offers, potential cash deficits can be identified as early as possible, allowing action to be taken to improve the cash position; for example, to raise additional finance or delay purchase of a capital asset.

#### **Rolling budgets and their potential drawbacks**

Rolling budgets can involve a significant amount of work, although it could also be argued that they spread the workload. More work results in a more expensive budget setting process.

There is limited benefit in planning too far ahead as the accuracy achieved may not be worth the expense of gathering and analysing the information. The further out the period under review, the less accurate it is likely to be, and this may be dangerous if the long-term element of a budget is overly relied on for planning and decision making. If we adopt rolling budgets at BackOffice, it would be important to ensure that additional long-term work is limited to areas where there are clear benefits.

Frequent changes to a budget can cause communication issues and confusion for the managers that are tasked with implementing them. These managers may also perceive changes in budgets to be a continuous moving of the goalposts, which may be demotivational.

It may be more appropriate to implement rolling budgets for those budgets that are needed in the most unpredictable business environments, such as the budgets for the Cycle Backpack and other new initiatives. There may be less benefit in introducing rolling budgets for our EDC and Office Backpacks and we could leave the existing incremental budgeting approach in place for our existing operations.

## **Costing of app**

### **How to determine the cost per app download**

The cost per download appears to be straightforward: it is the total costs incurred during the lifetime of the app divided by the total lifetime number of downloads. The costs themselves are the direct costs of each app download plus the direct costs associated with this specific app plus an appropriate share of any indirect costs associated with the app.

By definition, a direct cost is “the amount of expenditure (actual or notional) incurred on, or attributed to, a specific thing or activity”. Based on the information in Schedule 1, the only direct cost per download is the variable cost of H\$0.50 per download which the app hosting company will charge to BackOffice. The other direct costs attributed to the app are the fixed costs incurred for the development of the app (H\$450,000) and the annual fee charged by the external company responsible for hosting the app (H\$300,000). In addition, any future cost incurred for the maintenance and upgrade of the app, charged at H\$600 per day, are also direct costs as they are costs that will only relate to the app.

The indirect costs are those costs that cannot be associated with the app specifically. The H\$50,000 annual cost for the BackOffice managers’ supervision work is the only cost that we can consider indirect in this instance. BackOffice managers are not engaged to exclusively supervise work on the app, but rather across all aspects of the business.

In summary, the cost per download can be established by first adding together the H\$450,000 development cost, the recurring annual costs (H\$300,000 and H\$50,000 multiplied by the number of years the app will exist for), the necessary lifetime maintenance and upgrade costs (H\$600 multiplied by the total number of days required) and the total variable costs (H\$0.5 multiplied by the total number of downloads) and then dividing this total cost by the lifetime number of app downloads.

### **The difficulties of determining a cost per unit of the app**

As we are at the start of the life of the app, it can be difficult to determine both the number of downloads that will occur over the entire lifetime and the total lifetime cost of the app.

It is almost impossible to determine the number of app downloads likely over the lifetime of the app. There is a case for assuming a strong correlation between those who purchase a Cycle Backpack and those who buy the app as they will receive a significant discount. However, we do not know how the new Cycle Backpack will be received by the wider market and this makes lifetime purchases of the backpacks difficult to predict and therefore, lifetime purchases of the app even more so. We are even less sure how many non-BackOffice customers will buy the app. Doubtless there are already many cycle apps available for download that are established brands with loyal users. Our app may not provide the user with a unique enough experience to gain significant switches from these established apps. Furthermore, the BackOffice brand is associated with luxury backpacks and not cycle apps, which may mean that even if our app is as good as the market leaders, it will fail to attract enough downloads to warrant retaining it. Alternatively, the app may be a huge success as we may discover an untapped market, in which case the number of customers will reduce the cost per download. Unfortunately, at this stage of the app's lifecycle, we cannot know which scenario (few downloads or many downloads) will be reflected in reality, which makes the determination of the cost per download difficult.

Most of the costs associated with the app will occur in the future and this may mean that we cannot secure accurate contract costs. For example, as we do not know if the app will be successful, we do not know how many years the app will need to be hosted and we could incur higher costs if we are only able to commit to short-term contracts.

Similarly, the maintenance and upgrade work costs depend on the success of the development. This may mean that the Development Team will have been able to future proof the app sufficiently to minimise the number of upgrades over the lifetime of the app.

The BackOffice management indirect costs are also difficult to determine as we do not know what an appropriate share of management time might be at this stage of the app's life. Although we have probably apportioned the H\$50,000 annual indirect cost to the app on the basis of management time, the number of hours needed is difficult to gauge at the moment as we have no prior experience upon which to base our apportionment. It is also likely that once the app is established the amount of time management will spend supervising work on the app might change. We, as a company, have not had experience with the lifetime costs associated with delivering an app. Therefore, some aspects of the app cost are alien to us, such as the cost of maintenance and the length of time the app will be relevant. While these can never be known with certainty and will add to the difficulty of determining the cost per download, apps are an everyday digital product and information of estimated app life and cost will be available to us.

## SECTION 4

### Review of KPIs for website sales

**The customer acquisition cost (CAC)** measures the cost incurred to acquire a new customer. Monitoring this KPI allows us to assess the efficiency of our promotional campaigns in relation to generating new sales. The actual CAC in August is almost double our target CAC, which is a significant increase in cost. However, we know that the cost in August included the promotional cost of the emergency campaign for “International cycle-to-work day”. These costs included advertisements, links from websites and free gifts. This spend is unusual and aimed at acquiring customers that might not otherwise have considered buying our Cycle Backpacks.

**The Bounce rate** measures the percentage of visitors to our website who leave after viewing only one page. A high bounce rate usually indicates that the visitor does not find the website engaging and/or does not find what they are looking for. Often a too high bounce rate will trigger a change to the website’s design, content and user experience. At 60%, the bounce rate in August is significantly above our target, but this has probably been caused by the promotional campaign. The campaign included links from external websites to our Cycle Backpack page and, while visitors may have been attracted by the offer of a free water bottle, our premium price may have put them off when they landed on this page.

**The cart abandonment rate** measures the percentage of potential customers who add items to their shopping cart but leave the website without completing the purchase. A high cart abandonment rate could indicate that there is friction in the process. It is encouraging that the August rate is lower than target, which indicates that customers are not finding the checkout process problematic. This KPI is unlikely to have been affected by the promotional campaign, although it does show that potential online sales were not impeded by a difficult conversion process.

### Sales variances

#### **Sales price variance**

This variance occurs when products are sold at a higher or lower price than standard. As we have a favourable variance, this means that we sold our Cycle Backpacks at a higher price than expected. As all website sales were at standard price, the selling price to our retail agents must have been higher, on average, than standard. As the promotional campaign was aimed solely at website sales, it is unlikely that it had anything to do with the selling price of Cycle Backpacks to our retail agents and therefore, the price variance.

## **Sales profit volume variance**

This variance shows the effect on profit of selling a greater or lesser sales volume than budgeted. As the variance is favourable, this means that we sold more Cycle Backpacks than budgeted in total, despite the fact that the retail sales volumes were lower than expected. All sales made in excess of budget are due to an increase in demand for website sales. The promotional campaign is likely to be the cause of this increase in actual sales volume over the budgeted volume.

## **Direct labour variances**

### **Direct labour rate**

This variance is H\$2,400 adverse, meaning that we paid the machinists in the Sewing Department more per hour than standard. The reason for this is all due to the temporary H\$1 per hour pay increase. This increase appears to have been given as an incentive to work long hours to ensure that bottleneck problems caused by the lack of specialist machines were kept to a minimum.

### **Direct labour idle time**

This variance means that our machinists were paid for hours that they could not be productive due to some factor outside of their control. This seems to have been caused by the necessity of shutting the sewing machines down for servicing. Although it would seem preferable to perform this service when the machines are not being used, as these specialist machines are bottleneck resources and are running continuously, this is not possible.

### **Direct labour efficiency**

As this variance is adverse, it means that our machinists took far longer than they should have had to make the actual volume of Cycle Backpacks in August. There are a number of possible reasons for this variance: perhaps the long hours worked caused the machinists to be slow or careless due to tiredness, perhaps the machinists are inexperienced or perhaps the standard is wrong. However, it is possible that this variance is caused by the incorrect machine set-up, causing the machines to run slow.

## **Expected values**

We have to decide whether to pay a maintenance company to investigate the set-up of our specialist sewing machines. Table 4 details the cost of investigating or not investigating based on the probability of the setup being either correct or not correct.

The expected value for each course of action is the sum of the weighted averages of the outcomes, where the weighting is by probability. It represents the long run weighted average of all outcomes, assuming that the process was conducted many times.

To decide if we should pay the maintenance company to investigate or not, we will compare the expected value cost of both options and select the lowest cost. In this case, the lowest cost is the option to investigate as this only costs H\$1,004.40 (H\$504.40 + H\$500.00), compared to H\$1,649.20.

## OPERATIONAL CASE STUDY

### NOVEMBER 2024 & FEBRUARY 2025

### EXAM ANSWERS

#### Variant 2

*These answers have been provided by CIMA for information purposes only. The answers created are indicative of a response that could be given by a good candidate. They are not to be considered exhaustive, and other appropriate relevant responses would receive credit.*

*CIMA will not accept challenges to these answers on the basis of academic judgement.*

#### SECTION 1

##### KPIs

##### **Recycled material usage**

This measures the percentage of recycled materials used in the production process. Supplier 2 uses only recycled materials, most if not all of which will be derived from reclaimed PET bottles. Supplier 1 uses 2% of other materials in addition to recycled materials. While it may seem that 100% recycled material usage is the better option, there could be excellent sustainable reasons for incorporating a non-recycled material: it may add durability, tensile strength, or dye receptibility that improves overall fabric performance.

##### **Tear strength**

This measures the strength of the fabric in terms of it being able to resist tears and abrasions. The ballistic nylon we use has a tear strength value of 460 Newtons and the PET polyester offered by both Suppliers 1 and 2 (320 and 280 Newtons respectively) fall a long way short of this. However, both scores are better than the material used in the majority of backpacks (most have a tear strength below 130 Newtons). Supplier 1 produces the better-quality material by this score, and this is possibly due to the 2% additional non-recycled material.

## **Waste reduction rate**

This measures the reduction in waste generated during the manufacturing process over a 5-year period. In this measure, Supplier 2 appears the best performing of the two, as it has reduced the waste by 68% as compared to Supplier 1's 49%. However, while this KPI indicates that Supplier 2 has made the best in-house improvement over the period, it does not prove that it is the least wasteful of the two suppliers. Supplier 1 may have been much less wasteful at the start of the 5-year period, which makes a further reduction in wastage more difficult to achieve.

## **Working capital cycle**

Supplier 1's proposal would affect two aspects of our working capital cycle: Inventory and payable days.

Supplier 1's proposal means that, in effect, we would not hold any inventory of the PET polyester fabric. At present, we hold 2 months of ballistic nylon in inventory, and so this proposal would reduce our inventory holding. This would reduce the number of days in our working capital cycle and tend to improve our liquidity.

Currently, our ballistic nylon supplier offers us 30 days' trade credit. This would be reduced if we accepted Supplier 1's 14-day terms. A reduction in our payable days would increase the length of our working capital cycle and tend to reduce our liquidity.

Overall, the net effect of this proposal, if considered in isolation, is likely to improve (reduce the number of days in) our working capital cycle.

## **CGMA's cost transformation model**

It is important to understand that the cost transformation model is not simply about sourcing the cheapest cost materials or cutting corners in the manufacturing and marketing process. If it were, it simply would not apply to a premium brand such as ours. The model encourages the study and analysis of an organisation's costs in order to eliminate inefficiencies and costs that do not add value (value is considered from the point of view of the customer).

## **Generating maximum value through new products**

One of the best ways to transform costs is to avoid incurring them in the first place. This can be achieved by understanding what the customer's needs and wants are and only responding to these if it is profitable to do so.

Here at BackOffice, we incur substantial costs in our design process (CAD, pattern making, prototype building and prototype testing) prior to deciding to launch a product. We might benefit from conducting more thorough marketing research earlier in our design process.

For example, we recently developed and launched a backpack for people with young babies which we had to immediately withdraw from the market. Analysis following this failure revealed that not only did our brand not appeal to this market, but that the product would be likely to dilute and contaminate our brand value. Notes from the company that conducted the research concluded that we would have avoided most of our development and design costs had we commissioned this research earlier.

Our Salvare backpack range has been developed with a clear target market in mind. We chose the PET polyester material, early in the development process, knowing that this would appeal to the greatest volume of potential customers. Therefore, costs in the further development of our Salvare range have been incurred intelligently, with a view to maximising future profits.

### **Managing the risks inherent in driving cost-competitiveness**

For this aspect of the model, we need to consider and then manage any risks associated with cost reduction. For example, when we began to search for a PET polyester supplier, we dismissed many of the cheaper suppliers as their polyester had too low a tensile strength, too low a tear strength or did not dye well enough. In short, their products did not meet our standards. We would not risk the disruption to production and potential damage to our brand by using these cheaper suppliers.

We also decided we would continue to single source the main fabric of our backpacks, rather than risk any inconsistency in our supply, even if a multiple supplier policy would have reduced purchase costs. We assessed that the benefit of a single collaborative relationship for such an important material, in terms of problem solving and preferred treatment, reduced the risk of damage to our product quality and reputation. The choice of this supplier is so important that the SMT itself will make the final selection.

In addition, Dee Sands, Head of Procurement, is also going to manage the relationship with the new supplier chosen for the first few months to ensure that any problems are dealt with in a timely manner, thus minimising the risks.

### **Incorporating sustainability to optimise profits**

This aspect of the CGMA cost transformation model focuses on the detrimental impact business processes can have on the environment. We aim to be carbon neutral by 2030 and are continually striving to improve our supply chain, manufacturing processes and outward logistics to get closer to this. In addition, the power source at the BackOffice offices and Production Facility is largely supplied by solar panels and all company vehicles are electric. Therefore, our new products are being developed and produced with a clear sustainability background.

There is probably no better example of BackOffice considering the environmental impact of products, than the development of the Salvare range. The main material for this range is PET polyester, a fabric made entirely (or almost entirely) from pre-used water bottles that would otherwise be consigned to landfill.

In addition, BackOffice aims to develop new product ranges with a view to maximising its life in terms of materials used (the habitual use of the highest-grade denier polyester) and flexibility (as evidenced by the new Modis range where interchangeable packs extend the functionality of the EDCs). This policy of designing products to last has long been the way BackOffice has developed new products. BackOffice is a premium fashion brand; it is not fast fashion, and this makes the product inherently sustainable.

## SECTION 2

### **Right-of-use asset**

IFRS 16: Leases states that right-of-use assets, which the new cutting machine will be, must be initially measured at the lease liability plus any direct costs incurred by the lessee. Adjustments may also be required for lease incentives, payments at or prior to commencement and restoration obligations or similar.

The cutting machine right-of-use asset would be initially recorded at a value which includes:

- The lease liability, which would be the present value of the future annual lease payments on 1 March 2025. This would be the present value of the 4 annual payments of H\$60,000 starting on 1 March 2026, discounted at 6%, which is the interest rate implicit in the lease.
- The lease arrangement fee of H\$5,000.
- The lease payment that would be made on the first day of the lease, which is H\$60,000.

The right-of-use asset would be included as part of non-current assets in the statement of financial position at 30 June 2025. It would be measured at its initial cost (as explained above), less accumulated depreciation and any impairment losses.

As ownership would not transfer to us, depreciation would be charged to the statement of profit or loss over the shorter of the useful life of the underlying asset (9 years) and the lease term (5 years). The depreciation charged for the year ending 30 June 2025 would be for the 4 months from March 2025 to the end of June 2025 (the value of the right-of-use-asset/ 5 years X 4/12).

## **Cash flows**

If we purchase the cutting machine for cash, there would be a total purchase cash outflow of H\$250,000 compared to a total lease cash outflow of H\$305,000 ((5 X H\$60,000) plus the H\$5,000 lease arrangement fee). If the H\$250,000 purchase causes our bank balance to fall into overdraft, we will also have interest payments as a further cash outflow.

The timings of the lifetime cash-flows would be different because if we purchased the cutting machine, the full H\$250,000 would occur on 1 March 2025, whereas the lease payments would be spread, relatively evenly, over the next 4 years.

At the end of the lease term, the cutting machine would be returned to the lessor, but we would continue to own the purchased asset and would benefit from any cashflows it continued to generate, in terms of continued operations or re-sale value. Also, should the Salvare range fail, we have the option to sell our purchased cutting machine before the end of its useful life which will generate a cash inflow while the annual lease payments would still have to be made.

The best option for our company is to buy the cutting machine outright. This is because it is a significantly cheaper option and because we will be able to use the asset for longer than if we lease. All market research and our own ethos indicate that the Salvare range will be around for a long time which means that we will need a cutting machine for longer than 5 years.

However, despite the fact that our latest set of financial statements show an increase in the cash balance (from a H\$345,000 overdraft in 2023 to H\$314,000 cash balance in 2024), Arlo James has expressed concern that the high number of products in development may cause considerable strain on cashflow this year. If this is the case, it could be more beneficial to lease.

## **Multi-product profit-volume chart**

### **Fixed costs**

The total fixed cost for the Salvare range if we use Promotional Campaign 1 is around H\$520,000. This means that if we sell no Salvare backpacks, we will incur this cost and make a loss equivalent to this value. This H\$520,000 is the total fixed costs and comprises the fixed production and distribution costs as well as the fixed cost of promotional campaign 1.

Promotional campaign 1 has a fixed cost element that is approximately H\$70,000 more than promotional campaign 2. This assumes that the difference in the fixed costs of the two campaigns is all due to the promotional campaigns, which is likely as the other fixed costs are stated to remain constant.

## **Breakeven**

If we use promotional campaign 1, we will breakeven at a revenue of around H\$880,000. At the breakeven point, the total fixed costs are equal to the total contribution, which means we make neither a profit nor a loss. Promotional campaign 2 breaks even at a little under H\$1,000,000 revenue, which is a higher point than promotional campaign 1, despite having less fixed costs to recover.

## **The margin of safety**

The margin of safety is a measure of the risk of failing to breakeven. To compare the two campaigns, we would calculate this as: (expected revenue - breakeven revenue) / expected revenue, expressed as a percentage. Reading from the graph, promotional campaign 1 shows a margin of safety of approximately  $(\text{H}\$950,000 - \text{H}\$880,000) / \text{H}\$950,000$  and promotional campaign 2 of approximately  $(\text{H}\$1,150,000 - \text{H}\$1,000,000) / \text{H}\$1,150,000$ . Whichever of these is the largest percentage is the lowest risk. It appears that this looks to be promotional campaign 2.

## **Revenues/volumes**

If we choose promotional campaign 2, we can expect a higher total revenue than if we choose promotional campaign 1. From this, we can conclude that we would sell more backpacks if we chose promotional campaign 2. As promotional campaign 2 has a lower contribution to sales (C/S) ratio and the same selling price for all models, while maintaining a similar sales mix, the only explanation for the higher revenue is that we sell more backpacks. We can discern the similar sales mix by observing the similar length of line between product points on the graph.

## **Gradient of the product lines**

If we choose Promotional Campaign 1, the overall slope of the product line is steeper. This is because every product in the Salvare range has a higher C/S ratio. As the selling price and production variable costs remain the same for both campaigns, the reason that Promotional Campaign 2 has a shallower slope is because of the H\$25 donation per backpack sold to an environmental charity. In effect, this is an increase in variable cost per backpack which reduces the contribution per backpack and the C/S ratios. The C/S ratios have not fallen by the same proportional points. For example Salvare 1 has fallen by 0.14 (0.65-0.51), whereas Salvare 4 has fallen by 0.18 (0.54-0.36). This is because the absolute H\$25 variable cost represents a higher or lower proportion of total variable cost for the different models.

## SECTION 3

### What-if analysis

#### **The effect of the promotional campaigns**

The column for the Promotional Campaign 1 shows what will happen to the budgeted contribution and profit if we assume that a H\$70,000 increase in fixed promotional spend results in an 18.0% increase in sales volume. As the selling prices and variable cost per backpack are the same as for the original budget, the 18.0% increase in sales volume will also increase the revenue, variable costs and contribution by 18.0%. The fixed costs have increased by 15.6% as fixed marketing costs are a part of total fixed costs. However, as the H\$70,000 absolute increase in fixed costs is less than the absolute increase in contribution, scenario 1 shows an increase in overall profit.

The column for the Promotional Campaign 2 shows what will happen to the budgeted contribution and profit if we assume that a H\$25 increase in marketing variable cost results in a 41.3% increase in sales volume. As the selling price per backpack has not changed, the 41.3% increase in revenue is entirely due to the increase in sales volume. The 93.8% increase in total variable costs is a combination of the increase in variable cost per backpack and the increase in volume. Because the overall effect of an increase in volume and an increase in variable cost is a 4.5% increase in contribution, we know that the total increase in revenue is higher than the total increase in variable cost. As the fixed costs have not changed, the absolute increase in profit, under Promotional Campaign 2, will equal the absolute increase in contribution. However, as profit is a smaller value than contribution, the proportionate percentage increase is higher at 64.7%.

#### **What-if limitations**

One limitation of this approach is that it takes no account of the probability of the change happening. For campaign 1, we assume that a H\$70,000 increase in fixed promotional spend will result in an 18% increase in sales volume. However, as this is a new product, using different materials, we cannot be sure that our budgeted figures are accurate, so an assumption based on this budget can be considered even less certain.

A second limitation is the assumption that variables outside of the “what-if” scenario are not affected. For example, with Promotional Campaign 1, we assume that an 18% increase in sales volume will increase both total sales revenue and total variable costs by 18%. This assumption does not consider the possibility that the variable cost per unit may decrease due to volume discounts or economies of scale.

## **A risk neutral approach to establishing sales volume**

Expected values appeal to those with a risk neutral attitude. Our original budget was based on the expected values for sales volume which is 5,023 backpacks in the first quarter of trading the Salvare range. Expected value is the weighted average of the possible outcomes. It represents the sum of the probabilities for expected volume multiplied by the expected demand.

The limitations of using expected value to determine budgeted sales volumes are as follows:

- The expected value of a decision represents the long-run average outcome that is expected to occur if a particular course of action is undertaken many times. We will launch the Salvare range only once and therefore it is unlikely that the actual outcome will equal the expected value.
- The probabilities used to weight the outcomes are subjective and, while we have used an experienced market research company to provide us with probabilities, they could be inaccurate, which would result in very different costs, revenues and profits than the original budget in Table 1.
- Expected value gives us no information about the dispersion of outcomes. From Table 2, we can see that the range of expected sales volume for the quarter is quite wide, being between 400 and 12,000 backpacks. However, the conventional measure of the dispersion of a probability distribution is the standard deviation. The standard deviation allows us to assess the likely volatility of demand for the Salvare range. A standard deviation of 3,291 backpacks based on an expected value of 5,023 shows high volatility and therefore a high risk that sales demand could be much lower or higher than 5,023.

## **Flexible budgets**

The original budget in Table 1 reflects the information we have on costs and revenues at a single level of activity. A flexible budget shows the same information, but for a number of different activity levels.

### **Constructing a flexible budget**

The starting point to constructing a flexible budget is to separate all of the expected costs by cost behaviour. To do this, we would need to establish which of our costs are variable, semi-variable or fixed in nature. The semi-variable costs would need to be separated into their fixed and variable elements.

A variable cost will vary with the level of activity (in our case either production or sales volume). Our variable costs of production are: direct materials, direct labour and variable overhead. We may also incur non-production variable costs. For example, if we use Promotional Campaign 2, we will have a H\$25 variable marketing cost. As well as calculating our unit variable costs, we would need to establish our expected selling price for each backpack in the Salvare range. We would then flex our unit revenues and unit variable costs to reflect the expected total revenues and variable costs at different activity levels.

We would then deduct the expected fixed costs from the contribution to arrive at a budgeted profit for each of the selected activity levels. Our fixed costs include production and non-production overhead costs. Although fixed costs by definition do not vary with the different levels of activity, this only applies to a relevant range of activity. We would need to investigate if any of the fixed costs are stepped fixed costs which would increase when a particular level of activity is reached. For example, if we use Promotional Campaign 1, we will incur an additional H\$70,000 fixed cost.

## **Planning**

Flexible budgeting is helpful as it allows us to understand the impact on profit of differing levels of activity. We have already been testing this impact to a degree with the “what-if” analysis in Table 1. There is uncertainty in our budget estimates, particularly the sales volume, and this will have implications for our material and labour cost budgets. The use of flexible budgeting will help us to better plan our resources and to put contingency plans in place if the budgeted level of activity is not achieved or is exceeded.

## **Control**

Flexible budgeting is most useful for control purposes. Once we begin making and selling the Salvare range, we can flex the budget to reflect the actual level of activity in order to facilitate a like-with-like comparison with actual costs and revenues. To do this, we would change our sales and variable cost budgets in response to a change in the level of activity, keeping the fixed element constant (allowing for stepped costs). This flexed budget would allow us to calculate variances which would compare the actual sales and costs with the sales and costs that we would expect to achieve at the actual level of activity. This would allow us to identify and react to any inefficiencies or efficiencies.

## SECTION 4

### **How issues should be treated in the financial statements**

As the financial statements for the year ended 30 June 2025 are not yet finalised, we can make adjustments for events which happen after the reporting period as long as they are adjusting events in accordance with IAS 10: Events after the reporting period.

#### **Issue 1: compensation paid to an employee.**

The H\$30,000 compensation payment to the employee on 1 July 2025 is an adjusting event because it gives evidence of a condition that existed at our year end, although it could not be quantified at that point. The condition was the injury to Employee X that occurred in May, before the year end. As this is an adjusting event, the H\$30,000 should be charged to profit or loss for the year ended 30 June 2025 and a corresponding liability established.

#### **Issue 2: a goodwill gesture and destroyed backpacks.**

The gesture of goodwill is not an adjusting event. The delivery of the backpacks, the replacement of the backpacks and the goodwill gesture all took place after the reporting date of 30 June 2025. Therefore, the goodwill gesture is independent of any condition which existed at this date. The cost of this goodwill gesture will reduce profit in the statement of profit or loss for the year ending 30 June 2026.

However, the faulty backpacks were in inventory on 30 June 2025 and therefore the notification after the year-end of them being faulty is an adjusting event as it does give evidence of a condition that existed at our year end; the inventory was faulty. Therefore, H\$1,480 should be charged to profit or loss for the year ended 30 June 2025 and the value of finished goods inventory reduced.

#### **Issue 3: inventory sold as seconds**

IAS 2: Inventories requires that inventories be measured at the lower of cost and net realisable value (NRV). The 40 faulty backpacks were included in the statement of financial position at 30 June 2025 and valued at cost of H\$3,480. The seconds' retail value of these 40 backpacks is H\$3,500, after incurring a repackaging cost of H\$400 and therefore the NRV is H\$3,100 (H\$3,500 - H\$400). As NRV is lower than cost, in the financial statement for the year ended 30 June 2025, the difference between the two is charged to profit and the value of finished goods inventory reduced to the NRV.

### **Commentary for the June Salvare variance report**

#### **Direct labour rate H\$5,123 Adverse**

An adverse variance means that, on average, we paid our operatives more than the standard hourly rate.

The agency staff we used for the second half of the month would most likely have been paid at a higher hourly rate than BackOffice's own workers. This is because a profit margin for the agency would also have been incurred as well as the hourly rate for these experienced machinists. In addition, it was sewing machinists that we recruited, and these direct workers are paid a higher rate than the other operatives.

### **Direct labour idle time H\$5,973 Adverse**

Idle time represents the time that we pay our workers while they are not working directly on production. In June, we paid for 4,700 direct labour hours, whereas there were only 4,400 hours actually worked. During June, we scheduled additional training for the specialist cutting machine operatives, this would have taken them out of production for the duration of the training. In addition, the cutting machine was broken during June, and this would have caused idle time for the operatives who should have been working on the machine as well as the direct workers downstream of the Cutting Department who could not work due to lack of materials to work with.

### **Direct labour efficiency H\$3,982 Favourable**

A favourable variance means that we took less hours than expected to produce 2,000 backpacks. These hours relate to the hours that we spend actually working and not the hours paid, which is accounted for by the idle time (above). The efficiency could be due, in part, to the agency staff who were experienced sewing machinists and perhaps quicker than our own staff. Another possible reason could be due to the training course, which may have led to more efficient cutting operatives.

### **Variable overhead expenditure H\$3,740 Adverse**

The adverse variance means that we have spent more per hour for the hours worked on variable overhead than standard. A contributor to the adverse variance is the overtime paid to the operatives in order to catch up with the backlog of work caused by the outage of the cutting machine. In our company, overtime premium is charged to variable overhead.

### **Variable overhead efficiency H\$2,430 Favourable**

The favourable variance means that we took less hours to make 2,000 backpacks than expected. We incur variable overhead based on direct labour hours worked and do not recognise idle time in our overhead calculations. We produced 4,600 hours' worth of standard output in 4,400 actual hours. The reason we took less hours than expected is the same as for the labour efficiency, as described above.

**Fixed overhead expenditure H\$1,113 Adverse**

The adverse variance means that we incurred more fixed overhead expenditure than we budgeted for in the fixed budget. A possible reason for this overspend is the cost of repairing the cutting machine. We would not have budgeted for this repair as the cutting machine is under warranty. However, we had to pay as the cause of the breakdown was outside of the terms of our warranty.

**Fixed overhead capacity H\$117 Favourable**

A favourable variance means that we had more units of the overhead absorption basis (in our case direct labour hours) available to us in the month than budgeted for in the fixed budget. One reason that this could be the case is that we recruited agency sewing machinists for the second half of the month. This recruitment was in reaction to an emergency situation and would not have been accounted for in the budget.

**Fixed overhead efficiency H\$782 Favourable**

This variance is favourable for the same reasons as the variable overhead efficiency. We worked on production for fewer direct labour hours than standard for actual production. Therefore, this variance too is a result of the cutting machinists' training and the experienced sewing machinists provided by the agency.



## OPERATIONAL CASE STUDY

### NOVEMBER 2024 & FEBRUARY 2025

### EXAM ANSWERS

#### Variant 3

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#### SECTION 1

##### **Classification and measurement of the damaged prototype machine**

The prototype machine was damaged on 1 November 2024 and we need to consider whether there is an impairment in its value at that date. IAS 36, Impairment of assets states that an impairment will arise if the carrying amount of the machine is higher than its recoverable amount. Its recoverable amount is the higher of its fair value, less costs to sell and its value in use.

In this case, the carrying amount of the prototype machine on 1 November 2024 was H\$14,800. Its recoverable amount is the higher of H\$5,200 (net proceeds of sale) and its value in use, which is estimated at H\$10,000. Therefore, on 1 November 2024, there is a H\$4,800 (H\$14,800 - H\$10,000) impairment in the value of the prototype machine. This impairment loss will be written off as an expense to the statement of profit or loss for the year ending 30 June 2025.

The damage to the prototype machine has also resulted in a reduction in the useful life of the asset. Where there is a change in useful life, IAS 16 Property, plant and equipment states that, from the date of the change, the carrying amount of the asset should be depreciated over its remaining useful life.

On 1 November 2024, the useful life of the prototype machine reduced from a remaining life of 5 years to 3 years. From 1 November 2024, monthly depreciation will be calculated as the carrying amount on the date of the change (H\$10,000), less any expected residual value, divided by 3 years multiplied by 1/12. Therefore, for the year ending 30 June 2025, the depreciation charge will be 4 months at the original monthly depreciation amount and 8 months at the new monthly depreciation amount.

## **“Beyond budgeting” approach compared to incremental budgeting**

Our incremental approach to budgeting is a traditional approach whereby we produce a new budget each year. We take the previous year’s budget and add a percentage to allow for inflation and any other cost increases. We then make specific adjustments for known changes, such as an increase in supervisory staff. A “beyond budgeting” approach produces rolling forecasts on a monthly or quarterly basis, using the most up-to-date information each time.

In the Research & Development Department, this forward-looking approach would have been useful over the last year, as our budgets would have been more informed. We would have known that there was no market for our Baby Kit backpack and reallocated resources earlier to products with more potential like the Modis Packs.

In addition, a rolling budget would have alerted the SMT to likely delays and overspend in the Modis Packs development much sooner. This would have allowed the evaluation of options to ensure the overspend and delay were minimised. For example, the machine could have been replaced, fixed earlier or another machine rented or leased.

Our incremental budgets help us to evaluate and control through comparing actual results to the fixed budget and departmental variance analysis. While there is no doubt that these methods can be insightful and useful, the focus is internal and backwards looking.

A “beyond budgeting” approach uses much wider performance measures including non-financial measures. Elements of performance assessed to be vital to the success of a department are quantified and measured, often on a continuous basis. These elements are often external in nature, linked to customer expectations or competitor activity. Our Research & Development Department would benefit from performance measures linked to customers and competitors as it would prevent us developing products that are not valued by our customers and/or designed to meet needs already satisfied by other companies.

Incremental budgeting is excellent in stable business environments, where the activities of the past are relevant and likely to be repeated. The “beyond budgeting” approach encourages a culture of innovation, which allows investigation of assumptions that there is a constant “best way” to do things. Thus, assumptions that a manufacturing process is already as efficient as possible and cannot be improved are challenged and alternative methodologies for the process investigated.

This challenging and innovative approach is eminently suited to a department that’s very existence is committed to innovation and change. Our Research & Development Department is currently involved in sourcing recycled materials, reducing wastage and appealing to new markets. Therefore, an incremental approach to budgeting is not ideal for this as it is largely restricted to repeating past actions.

With the “beyond budgeting” approach, there is also a move for budgets to be set at local level with more participation from lower-level managers. This contrasts with our current approach whereby the annual budget is set by the directors with little input

from the rest of the business. A beyond budgeting approach will allow local managers, who best understand the business and its environment, to produce more realistic rolling budgets. In turn, this will benefit ownership and control. In recent months, the Research & Development Department has been involved in more projects than it can manage. A more realistic budget might have meant we delayed some of the new product initiatives.

### **Key performance indicators**

#### **Revenue generated from new products**

This can be measured by total revenue generated by new products (these could be defined as products developed within the last year) divided by total company revenue, measured as a percentage. This will monitor the effectiveness of the Research & Development Department over time. This KPI will help us track the effect that the Research & Development Department has on future revenues. Recently, a fully-developed product failed to generate barely any revenue and was withdrawn as it was deemed unsuitable for the market. We need to ensure that we measure good performance in terms of commercial success and this KPI will help us to track this.

#### **Customer satisfaction with new products**

This can be measured by average rating of customer satisfaction with each new product/modifications of products undertaken by the Research & Development Department. The customer rating can be systematically gathered through surveys and feedback. A higher ranking would indicate that the department's efforts are meeting customer needs and preferences. A lower-than-expected ranking for a new product or modification would help us identify a mismatch between our understanding of what a good product is and our product users' understanding. We could use this understanding in future developments.

#### **Design to launch success rate**

This would be measured as total backpack (or backpack modification) launches (effectively this is where the Research & Development Department hands over to factory production) each period divided by total approved designs each period, measured as a percentage. This measures the Research & Development Department's ability to translate design concepts into functional and manufacturable products.

Poor designs might be approved but, unlike the Baby Kit backpack, they would not be launched. We would expect some approved designs to fail to be launched and would not expect a 100% success rate. A higher launch success rate is better than a lower one as it will result in future financial success for the company.

## SECTION 2

### Relevant costs

To be relevant, a cost should be a future, incremental cash flow. With reference to each of the items on Schedule 1:

1. The relevant cost of the 30 traditional EDC is not the H\$2,312 full manufacturing cost, as this cost is a sunk cost and not a future cost. However, each EDC could be sold for H\$50 and this represents an opportunity cost. The total relevant cost will be H\$50 x 30 units.
2. Ballistic nylon is a material that is in continuous use in our manufacturing process. Therefore, the H\$432 historic cost of the material in inventory is not relevant. The relevant cost would be the replacement cost of H\$12.20 per square metre x 36 square metres (which is higher than the cost detailed in Schedule 1).
3. The fleece H\$104 historic cost is not relevant as it is not a future cost. Since the fleece would not be used in our manufacturing again, the best alternative use would be to sell it to a market trader. The relevant cost therefore would be the future H\$1.00 per kg x 45 kg.
4. The Velcro has already been ordered especially for the conversion of the EDCs. This is probably a committed/sunk cost and not relevant unless we can return it without penalty, in which case, the H\$270 is relevant as it is a future incremental cash flow.
5. The H\$2,178 direct labour cost is only part of the labour relevant cost. Although it is a future cashflow, it does not consider the opportunity cost of the alternative use of the labour hours, which is an additional H\$30 per hour. The incremental (and relevant) cost would be H\$52 (H\$22 + H\$30) per hour. (Therefore, the relevant cost is higher than the cost detailed in Schedule 1).
6. The H\$248 variable overhead is a relevant cost as it varies with the labour hours worked and is therefore a future incremental cashflow.
7. The H\$297 fixed overhead is not a relevant cost as it is not incremental. Although the fixed overhead is absorbed on the basis of direct labour hours, the actual cost incurred is fixed in nature, that is, will not change as a result of this event.
8. The courier is a relevant cost as it will only be incurred if we choose to send the Modis products to the influencers. Therefore, the H\$300 is a future incremental cashflow.

### **Why a relevant cost can be higher than the costs in Schedule 1**

A relevant cost is a cost that changes as a result of a decision made and Schedule 1 was not compiled on this basis.

In many cases when resources are in short supply, we need to consider the opportunity cost of a decision. In Schedule 1, we made the decision to utilise direct labour hours in an event that would deprive the business of H\$30 contribution for each hour used. In this case, the relevant cost was higher than the original cost stated.

In times of inflation, future costs are likely to be higher than present costs. In schedule 1, the future cost of ballistic nylon, although higher than the present cost, was the relevant cost as it is in continuous use within the business.

### **Differences in the absorption costing and marginal costing budgeted profit statements**

Both sets of budgets are compiled using the same budget data: the number of units produced and sold, the number of units in opening inventory and the total variable and fixed costs for the period.

The difference between the two methods is the way in which the fixed overhead is treated. In the absorption costing statement, an element of the annual budgeted fixed overhead of H\$94,680 is included in the cost of each unit, based on our annual budgeted production levels. The opening inventory, production cost and closing inventory values are all higher in the absorption costing budget statement than in the marginal costing budget statement because, unlike the marginal costing equivalent figures, they contain the unit fixed cost element. The marginal costing budget statement treats the fixed production overhead as a monthly cost and this is simply subtracted from the contribution to arrive at the budgeted profit.

The absorption costing statement includes a figure for over absorption. The overhead absorption rate is calculated by dividing the budgeted annual fixed production overhead by the annual number of units produced. Each unit we expect to produce absorbs a unit's value worth of fixed production overhead. The total value absorbed is compared with the budgeted fixed overhead. In month 1, we are budgeted to over absorb fixed overhead by H\$2,630. As we know that the monthly budget for the fixed overhead is a 12<sup>th</sup> of the annual budget, this over absorption must be due to the budgeted number of units in month 1 being higher than 12<sup>th</sup> of the total annual budgeted production. In month 2, there is no over absorption when the budgeted number of units is 3,000. However, an adjustment for over or under absorption is merely a difference in presentation used to align the fixed production overheads in the two methods to the same value. It does not account for the difference in the profit figures.

The profit figures in the budgeted marginal costing and absorption costing statements are different because, in both months, the inventory level is increasing (more units are being produced than sold).

This means that in the absorption costing statement more fixed production overhead is being carried forward in the closing inventory valuation than is being brought forward in the opening inventory valuation. This results in a higher profit than under marginal costing because we do not suffer the full month's fixed overhead cost. When inventory levels are rising, marginal costing profit will always be lower. Similarly, when inventory levels are falling, marginal costing profit will be higher, and when inventory levels are static, both methods will produce the same budgeted profit.

### **Benefits of using marginal costing**

One clear benefit of marginal costing is that it makes profit a function of sales whereas, with absorption costing, profit is a function of sales and production. Marginal costing provides more useful information for decision making. Marginal costing separates fixed and variable costs which is necessary for product mix production issues with bottlenecks (make or buy, limiting factor, linear programming and so on). Relevant costing stipulates that for short-term decisions only incremental, future cashflow costs should be considered. Marginal costing separates the fixed and variable costs which makes the identification of incremental costs relatively straight forwards.

Marginal costing removes the effect of inventory level changes from profit. As we have seen from the budgeted figures in months 1 and 2, when inventory levels are rising, marginal costing results in a lower profit figure. The opposite is true when inventory levels are falling, as marginal costing will report higher profit than absorption costing. Over the course of a year, there would not usually be extreme changes in the opening and closing inventory levels, but this may not be the case over a shorter period when seasonal factors influence the levels. Nor is this likely to be the case with a significant increase in new product launches.

For example, as we produce monthly management accounts, it is likely that our inventory levels for the Modis range will fluctuate. This is because, as a new product, sales units cannot be accurately predicted, making production and sales units difficult to synchronise. This will also be true of the other new products: the Cycle Backpack, the PET Polyester Backpack, and the BackOffice cabin bag. Using absorption costing, these fluctuations in inventory levels will distort profits, which, as we are producing management accounts frequently, will render them difficult to interpret. Using marginal costing principles will prevent this.

In addition, as managerial performance is often linked to profit, there may be a temptation to build inventory levels to increase profit when using absorption costing. This is not an issue with marginal costing, for the reasons explained above.

Marginal costing also avoids fixed production overhead being attached to obsolete inventory. As absorption costing defers the fixed production overhead until a period in which the sale is realised, surplus inventory can be overvalued. If this surplus inventory is sold in a later period at a much lower price, the effect is to over inflate the profit figure in earlier periods and defer the losses in inventory value until later.

This is probably more important at present than usual to BackOffice because there are plans to launch several new products. As we will be less certain about the future demand for these new products, we have a higher risk of producing obsolete inventories. In effect, marginal costing profits more closely reflect cash flow in the business.

## SECTION 3

### Website sales variances

#### Modis packs

##### **Sales price variance H\$3,600 adverse**

This variance shows the effect on total revenue of selling the Modis Packs at a lower price than standard. The most likely reason this has occurred is as a result of the decision taken by the Website Sales Department to grant a discount for purchases of two Modis packs in a single transaction.

##### **Operational sales profit volume H\$6,741 favourable**

The sales profit volume variances show the effect on profit of selling a higher or lower volume of Modis Packs than budgeted. The operational sales profit variance shows that the actual volume of Modis Packs sold was higher than the revised budget. A revised budget is meant to be more realistic and up-to-date than the original budget and shows us true operational performance. The response to the threat of a competitor product was met with a price discount which may have improved the sales volume to a level higher than the revised volume.

##### **Planning sales profit volume H\$4,494 adverse**

This shows the effect on profit of changing the budgeted sales volume. This is where plans change to reflect new information. Usually, this new information is external to the company and outside of the control of the entity that is being assessed, in our case, the launch of a competitor's product similar to our Modis. We expected the competitor's product to have a negative impact on our Modis sales volume and lowered our sales volume expectations, which is why this variance is adverse. However, it should be noted that overall, the actual sales volume is higher than the original budget.

#### Small EDC

##### **Sales profit mix H\$236 adverse**

This variance shows the effect on profit of selling products in a different proportion to the budget. As the small Modis EDC has a lower standard profit than the small original EDC, the adverse variance indicates that we sold proportionately more Modis EDCs than expected. The reasons for this are not clear, but it could be as a result of the discount on the Modis packs as this would make the Modis "bundle" price more attractive to customers and may have swayed their choice from the original small EDC.

## **Sales profit quantity H\$4,786 favourable**

This compares the budgeted sales volumes with the actual sales volumes in budgeted mix to show the effect the quantity sold had on profit.

This shows that we sold more than expected, which has resulted in a favourable variance. The cause of this variance is unclear, but it is possible that the Modis discount made the overall package price more attractive, and customers were persuaded to buy from us instead of a competitor. As we have not been trading the Modis EDC for very long, it is also possible that our budget is incorrect.

## **Sales tax**

Sales tax is an indirect tax that is levied on the final consumer. Sales tax in Hland is charged on all standard rated goods and services at a rate of 20%. Tax attributed to sales is referred to as output tax, and tax incurred on purchases is referred to as input tax. As a company, we collect output tax from all our customers and pay it over to the Hland Government (we are allowed to net it off against any input tax we have incurred) every month. As we basically collect tax on behalf of the Government, we either owe output tax or are owed input tax. As sales tax is not a revenue or an expense, it has no effect on our profit figure. This is also the reason that all the sales variances as calculated at the selling price net of sales tax, as these are the values that will be recorded as revenues.

The vast majority of our website customers are final consumers, that is to say, they buy backpacks for personal use. Therefore, the sales tax inclusive sales price is the price they incur for the backpacks. When we sell to retailers, we are not selling to final consumers. Retailers are businesses that intend to sell-on the backpacks to final consumers. They will reclaim the input tax they are charged by us (our output tax) and not incur it as an expense. Therefore, it is appropriate that our website displays the price inclusive of sales tax and the retailers are quoted prices net of sales tax, because these are the costs the different categories of customer actually suffer.

## **Feedback and feedforward control**

Feedback control is a process in which a system monitors output or performance and adjusts its inputs or actions based on the difference between the actual result and a standard. The goal of feedback control is to achieve or maintain an accepted level of performance. This is the basis of our variance reports at BackOffice; we assess our performance against agreed standards which can result in adverse or favourable variances. If we believe that the variance is significant, we take action to correct it.

Schedule 1 shows us an extract of the website sales variances for June. The fact that the Small EDC sales profit quantity variance is large and unexpected has triggered an investigation as to its cause. Naturally, we would like to replicate this performance in future months, as it is a positive event, but equally a large unexpected adverse variance would be investigated. The purpose of the investigation would be to find reasons and, as a result, we would change either our inputs (our products) our actions/processes (work on the website, advertising, and so on) or our standard.

In the case of the competitor with a similar product to our Modis, Senior Management chose to change our standard and reduced the budgeted sales volume.

The purpose of these actions is to bring actual results in line with the budget. However, feedback control only alerts us that we need to act after the event and are therefore lagging indicators. The fact that the sales profit volume variance was most unexpected indicates that those appointed as responsible were unaware of the trends in June, and it is possible that by the time a cause is discovered it will be too late to take advantage and reproduce it.

Feedforward control anticipates disturbance in a system and takes proactive measures to counteract them before they affect the system's output. Unlike feedback control, feedforward control focuses on predicting and compensating for disturbances or changes in the system's inputs and taking action in advance of feedback from the system's output.

Schedule 1 shows us the result of the Website Sales Departments' feedforward control action. When senior management believed that if we remained on the current trajectory then the competitor's product would reduce our sales volume of Modis packs, the budget was revised downwards. The members of the Website Sales Department took a more proactive approach and put an action in place to prevent sales falling. They offered a discount for purchasing two Modis packs in a single transaction. This was more preemptive and positive than reducing the budgeted volume. It anticipated the problem (reduction in expected demand for the Modis packs) before it occurred and put in place an intervention to prevent it from happening. With feedforward control, we can identify and take action to correct potential problems before they are realised.

## SECTION 4

### **The principles behind the production plan**

The production plan has been compiled using limiting factor analysis, a short-term decision-making technique. This technique prioritises production by maximising the contribution obtainable from a single scarce resource, in our case, the labour hours in the Sewing Department. The technique uses contribution and not profit, as we assume that fixed costs are irrelevant as they do not change in the short term.

To determine Modis Packs order priority for manufacture, we first had to calculate the value of the contribution we generate per labour hour in the Sewing Department. We do this by dividing the contribution per pack by the sewing hours needed to sew a pack. This enabled us to rank the packs for manufacture in order of highest contribution per hour of our scarce resource. Our ranking order to manufacture is Travel Packs, Picnic Packs and Office Packs. This order will maximise total contribution and therefore profit.

The production plan shows that with the 800 Sewing Department hours we have available, we will manufacture 750 Travel Packs and 745 Office Packs. We make 750 Travel packs as, although we have 800 units demand in sales orders, we already have 50 packs in inventory. Making more than 750 Travel Packs would mean that we would be making packs to put in inventory rather than try to complete this week's sales orders. This would deprive us of the contribution we could earn from making Office Packs to satisfy this week's demand. When we make Travel packs, we use 0.47 hours per pack, which leaves us only 447 sewing hours to make other types of pack. We will not make any Picnic packs because we already have enough in inventory to fulfil the 150 packs ordered. We will only make 745 Office Packs as this is all we can make with the remaining 447 hours sewing labour ( $447 \text{ hours} / 0.6 \text{ hours}$ ). 745 Office packs are 25 ( $790 - 20 - 745$ ) packs short of what we need to fulfil sales orders this week.

### **Hiring agency labour**

The rate worth paying for a limiting factor (bottleneck) resource is any rate up to the shadow price per hour plus the normal cost per hour of that resource. The shadow price of a scarce resource is the contribution that can be earned from having one more unit of that resource. In our case, we could hire an agency sewing machinist for 15 hours in order to make the 25 Office Packs that we are currently short to meet this week's demand. As each Office Pack generates only H\$37.65 of contribution per sewing hour, which is less than the H\$38.00 additional cost to obtain the sewing hours, it is not financially worthwhile to use the agency staff. However, this is the most marginal of calls as we would only lose H\$0.35 per hour.

From a commercial perspective, it is almost certainly worth hiring the agency sewing staff. If we hire the staff for 15 hours, we will only lose slightly more than H\$5 contribution in total ( $H\$0.35 \times 15$  hours). Compared to the long-term damage from disappointed customers in terms of trust and reputational damage, this is a small price to pay.

### **The EOQ model**

The EOQ model trades off the cost of holding inventory with the fixed cost of placing an order. This derives the optimum order size by minimising the total cost of holding and ordering inventory. Since April, we have used the EOQ model to determine the order size for ballistic nylon, our most important raw material.

There are a number of assumptions underlying the EOQ model:

- Demand for ballistic nylon is known with certainty and is constant over the period.
- The lead time (the time from placing the order with the supplier to receiving the ballistic nylon) is known and consistent.
- The purchase price is known and is also constant.
- No buffer inventory is held (it is not needed if lead time is known with certainty).

### **Chart 1**

Chart 1 shows the planned inventory holding of ballistic nylon, assuming that all of the EOQ assumptions held true. The EOQ was approximately 26,000 square metres and would be used up in 10 weeks, at which time, the next order of 26,000 square metres would arrive. As the lead time and demand were assumed to be known with certainty, the reorder level is simply the usage in the lead time. The lead time was known to be 2 weeks and therefore, when inventory levels of the ballistic nylon reached approximately 5,400 square metres (2 weeks usage), an order would be placed with the supplier.

### **Chart 2**

Chart 2 shows the actual inventory level of ballistic nylon since April 2025. It is clear that we did not have 100% faith that our demand and lead time were known with absolute certainty as we maintained a buffer inventory of approximately 2,500 square metres of ballistic nylon. Buffer inventory is an insurance against stock-outs and it will not be needed unless actual demand per day during the supply lead time exceeds the average demand per day or if lead times are longer than expected (or both).

We did not use the buffer inventory during the first delivery of EOQ, but we dipped into it during the second round and used it up by the 3<sup>rd</sup> round (week 30) where we experienced a stockout. Although we are still ordering the EOQ, we have a higher reorder level, approximately 8,000 square metres, to allow for the buffer inventory. Management are probably prepared to incur the holding cost of a buffer inventory (amount of the buffer inventory multiplied by the annual holding cost for one unit of the inventory item), because they believe it is less than the associated cost of a stock-out (idle time, sales missed and customer dissatisfaction).

It looks as though our demand was reasonably constant but the lead time for the 2<sup>nd</sup> round was longer than 2 weeks and for the 3<sup>rd</sup> round, we have yet to receive the replenishment inventory, despite placing the order over 3 weeks ago. If our inventory management was adequate, we would have contacted the supplier when the delivery was late in week 20 to let them know that this was not acceptable.



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## OPERATIONAL CASE STUDY

### NOVEMBER 2024 & FEBRUARY 2025

### EXAM ANSWERS

#### Variant 4

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#### SECTION 1

##### **Management of receivables**

##### **Improvement to aged analysis and liquidity from factoring**

Currently, our aged analysis of receivables shows that nearly half of the amount due from small retailers is beyond the standard credit terms of 30 days. The picture, in respect of large retailers, is less clear, as credit terms range from 30 to 90 days; however, at least 10% of the balance owed is outside of credit terms.

Using a factoring arrangement means that the factor would take over responsibility for managing our receivables ledger in respect of setting terms, raising invoices and chasing for payment. A with-recourse arrangement means that we would still ultimately bear the risk of irrecoverable debts.

The factor will be expert in credit control and is likely to be able to recover monies faster than we do at present, which will boost our cash flow and liquidity as well as reduce the ageing of our receivables. As a result, the overall level of receivables should decrease, with a greater proportion of the amount outstanding being within the credit terms given to our retailers.

In addition to providing credit control expertise, this factor could also advance us a proportion of the value of invoices. For example, this factor could advance us, say, 80% of the value of our invoices on the date that the invoices are raised, which means that we would be receiving cash from sales much more quickly than we currently do. This would be a tremendous boost to our cashflow and liquidity.

## **Factors to consider**

A key factor to consider before agreeing to the arrangement is the likely cost of the arrangement. The factor will charge us a fee (usually a certain percentage of invoice value) for the provision of credit control services and will also charge us a finance fee on any amounts advanced. We will need to weigh up these costs with the benefits gained in terms of improvements in liquidity and a lower chance of irrecoverable debts that will arise because retailers are paying more quickly.

Another factor to consider is the impact on our relationships with retailers. As noted above, a factor is an expert in credit control and will be quite aggressive when chasing for payment. This may upset some of our retailers, especially the large retailers which have negotiated extended terms. This could affect their willingness to trade with us.

## **Big data analytics**

Big data analytics is about gathering, analysing and then using large amounts of data for a purpose; in this case, to forecast sales of backpacks in different retail locations. The data itself can be structured (typically quantitative and searchable) or unstructured (typically qualitative and more complex to search).

The sources and types of big data that could be used to create a forecast of sales at different potential retail store locations include the following:

### **Government reports**

Government reports will include information about levels of disposable income and possible factors that might affect this, such as future interest rate rises or changes in the national minimum wage. This type of information will be useful to assess the overall level of demand that might exist and how this might change. There may also be government information specific to the different types of location, for example, the number of passengers passing through railway stations and airports.

### **Industry and market research reports**

The external consultant is likely to have access to industry and market research reports that could give information about different retail locations. Such reports may contain, for example, information about footfall in out-of-town shopping centres versus high streets. This could be used to assess the possible number of customers at different locations.

These types of report might also contain information about empty retail space in different locations and maybe how often retailers change in these locations. Such information will help to assess the retail health of each location. There may also be reports that focus on buying behaviour in different retail spaces.

## **Social media**

Social media such as Facebook and TikTok can provide unstructured data which gives us insights into customer preferences and changing trends by tracking comments and likes. For example, tracking airport or shopping centre social media accounts might help to assess the likelihood of passengers making purchases rather than just browsing. Similarly, tracking location-based accounts in areas where high streets are located could provide information about the retail health in those areas.

## **Potential problems**

The potential problems that the external consultant will need to overcome can be explained in the context of the four characteristics of big data, known as the 4 Vs: volume, variety, velocity and veracity.

The volume of data available is vast and the external consultant will need to be able to sift out the data which is relevant for creating a forecast of sales in different locations. The consultant will need to have a clear idea of the specific railway station, airport, shopping centre and high street locations being considered to provide a focus for the collection of relevant data for that location.

There is also a huge variety in the format and consistency of data. For example, there are lots of different social media platforms and amongst these are significant differences in terms of the way information is shown in posts. The consultant will need to use different tools to be able to organise and analyse the content so that it can be used to create the forecasts.

Velocity refers to the speed at which data is generated and superseded. Information about demographics and disposable income in certain locations is likely to be continually changing and government statistics will quickly become out of date. Similarly, industry and market research reports about buying behaviour in different types of retail space could quickly become out of date as conditions in that location change.

Finally, veracity is about the reliability of the data. It is important that any data used is from a credible source, accurate and truly representative. The consultant will need to be mindful of bias, especially in respect of social media posts. Government reports and statistics are likely to be reliable, but industry and market research information may contain bias, especially if sponsored by or prepared by organisations which have an agenda to meet.

## SECTION 2

### **Chart 1 and what it indicates about the budget for the new accessories range**

Chart 1 shows budgeted revenue against budgeted profit or loss. The bowed line connecting ABCDE and F assumes that we sell the accessories in the order of c/s ratios (so, speakers, then smart pens, then lights, then cameras, ending with alarms). The straight line connected A and F assumes that we sell the accessories in the budgeted mix.

Point A on Chart 1 indicates that fixed costs are budgeted to be around H\$320,000 for the 4-month period. This includes the marketing costs for the new range and other additional fixed costs arising from selling the range, such as additional storage or administration costs. Point F on Chart 1 indicates that overall profit is budgeted to be around H\$40,000 and total revenue around H\$800,000.

Assuming that we sell the accessories in the budgeted mix, the chart indicates that we will make enough contribution to cover all of our fixed costs (that is, break-even) at revenue of approximately H\$710,000. This would give a margin of safety of around 11% ( $(\text{H\$710,000} - \text{H\$800,000}) / \text{H\$800,000}$ ). This means that we would only need a fall in revenue of 11% to generate a loss for the period.

Assuming that we sell the accessories in the order of c/s ratio, break-even is reached slightly earlier (at revenue of approximately H\$680,000) and therefore the margin of safety is a little higher at around 15% ( $(\text{H\$680,000} - \text{H\$800,000}) / \text{H\$800,000}$ ). This line also indicates, based on the length of each part of the line, that we expect to earn the largest absolute amount of contribution from lights and the least from alarms.

### **Factors to consider when interpreting Chart 1**

Chart 1 tells us break-even sales revenue and gives us an indication of the safety margin based on our initial budget estimates. However, there are a number of factors that need to be considered when interpreting the chart.

The budget on which the chart is based is only an initial budget. We are still negotiating with some of the suppliers of the accessories and therefore purchase costs are presumably, at this stage, not agreed. In addition, we have never sold products like this before, therefore there will be considerable uncertainty regarding the absolute level of sales volumes that we will achieve as well as the budgeted sales mix.

In addition, this type of break-even analysis assumes that selling prices, variable cost per unit and fixed costs are constant over the 4-month period and over the range of sales. This won't be the case if we decided, for example, to offer an initial discount in the first month, or if we had to change supplier during the period for some reason.

The assumptions used in the chart are also problematic. Assuming that we sell the accessories in the order of c/s ratio is highly unrealistic, especially given that the accessories are likely to complement each other (and therefore a single customer might purchase more than one type of accessory in a single transaction).

Equally, it is unlikely that we will sell our products at a constant sales mix, given that this is the first time we have sold accessories such as this. If we were to sell proportionately more cameras and alarms and proportionately less speakers and smart pens than budgeted, this would reduce the weighted average contribution to sales ratio and also the amount of profit generated. This might even result in a budgeted loss rather than a budgeted profit given the low margin of safety.

## **Decision tree**

### **The decision tree**

The decision tree shows that we have four possibilities for our SmartTech contract, based on combinations of two different decisions. The first decision (at point G on the decision tree) is whether to accept the ability to return unsold inventory at the end of the contract period in return for paying a higher cost per smart pen.

The second decision is whether to accept H\$80,000 from SmartTech so that we can reduce selling prices. Here, there are two separate decision points (C and F on the decision tree) because this is a possibility whether or not we are allowed returns.

Looking at the tree, we can see that there is a risk associated with the level of sales. Where we reduce selling prices (and accept the receipt of H\$80,000 from SmartTech), there is a 30% chance of low sales and a 70% chance of high sales.

If we don't reduce selling prices, the chance of low sales increases to 50%, which reflects the fact that higher selling prices increases the chances of a lower level of sales. These possibilities are taken into account by calculating the expected values for each of the four possible outcomes marked on the tree as A, B, D and E.

### **How to use the decision tree to make the decision**

To make our decision using the decision tree, we need to work from right to left, starting with the decision at point C. This is the branch of the tree where we will be allowed to return unsold inventory. At point C, we choose the option with the highest net profit expected after taking account of any receipt from SmartTech. Therefore, we compare H\$258,500 (H\$178,500 + H\$80,000 receipt) with H\$253,750 and will choose to accept the H\$80,000 and reduce selling prices.

In a similar way, we then need to consider the decision at point F. This is the branch of the tree where we will not be allowed to return unsold inventory and will therefore have a lower cost per smart pen purchased. At point F, we choose the option with the highest net expected profit after taking account of the H\$80,000 receipt. Therefore, we compare H\$267,500 (H\$187,500 + H\$80,000 receipt) with H\$242,500 and here, again, will choose to accept the receipt and lower prices.

We then work backwards to decision point G. Here, we need to compare the expected values from decision points C and F and choose the highest. At decision point G, we know that being allowed returns and accepting the H\$80,000 to lower selling prices

gives an expected net profit of H\$258,500. At decision point F, the expected net profit of not being allowed returns but accepting the H\$80,000 to lower prices is H\$267,500.

Therefore, at decision point G, we choose the higher of these, which is therefore not to have returns but to accept the H\$80,000 and lower selling prices. From a risk neutral and a financial perspective, this is the best combination of the options available.

### **Limitations**

One limitation with the decision tree is that it has taken quite a simplistic view of the possible outcomes. For each of the four possible contract combinations, only two levels of sales are considered: high or low. In reality, given that this is a new type of product for us that we haven't even started selling yet, the possible outcomes will be across a broad range rather than just two possibilities.

Another limitation of the decision approach is that it assumes that we, the decision maker, are risk neutral and will base our decision on the long-run average outcome, assuming that the decision is made numerous times. In reality, this is a one-off decision. Also, our decision is to not have the ability to return unsold inventory but to accept the H\$80,000 to lower selling prices. Here, the highest possible outcome is H\$305,000 if sales are high (H\$225,000 + H\$80,000), compared to H\$320,000 at high sales if we instead decide to not accept the H\$80,000, and this possibility is effectively ignored.

## SECTION 3

### **Expenditure for Store 1**

#### **Electronic point-of-sale equipment**

In accordance with IAS 16: Property, plant and equipment, the electronic point-of-sale equipment represents a tangible non-current asset because this expenditure is needed to be able to supply and sell our products directly to our customers. In addition, we expect to use this equipment and to obtain economic benefit from it for more than 12 months. Also, the cost can be reliably measured.

The amount that we can capitalise for this equipment is the purchase cost of the equipment, including any import duties and non-refundable taxes, as well as any costs which are directly attributable to getting the asset ready for its intended use. We will therefore be able to capitalise the H\$3,300 of import duties and the H\$5,000 for installation and testing (which is necessary and therefore directly attributable to getting the equipment ready for its intended use).

The training costs of H\$1,200 cannot be capitalised because such costs are not directly attributable to getting the equipment ready for its intended use. The equipment will be ready for use, whether or not the employees are trained. In addition, once trained, employees are free to leave the company and therefore the company does not have any control or certainty over the economic benefits that can be derived from that training. Therefore, the amount capitalised will be H\$55,000 less H\$1,200. The H\$1,200 will be written off directly to profit or loss for the year ending 30 June 2025, thereby reducing profit for the year.

The asset will need to be depreciated over its useful life and depreciation will start from the date that the asset is available for use, even if it doesn't start to be used on that date. This means that we will start to depreciate from 1 March as testing will have been completed the day before. Therefore, 4 months' worth of depreciation will be charged to profit or loss for the year ending 30 June 2025.

We will depreciate the asset over a useful life of 3 years, because this represents the period that we expect to derive economic benefit from the equipment. When calculating the depreciation charge, we will need to take into account any residual value of the equipment in 3 years' time (which presumably will be higher than nil, given that the equipment has an overall useful life of 5 years).

#### **Security system**

As for the electronic point-of-sale equipment, the security system will also be classified as a tangible non-current asset because this expenditure is also part of being able to supply and sell our products directly to our customers. In addition, we expect to use this equipment and to obtain economic benefit from it for more than 12 months and the cost can be reliably measured.

The amount that we can capitalise will be the purchase cost of H\$72,000, which is the overall cost of the system from the supplier. However, we will need to split the cost of this asset into two parts, to separate out the cameras from the rest of the system.

This is because the cameras have an expected useful life of 2 years and the rest of the system has an expected useful life of 10 years, meaning that we depreciate each part of the asset separately. Depreciation will need to reflect any residual value of the different parts and, for the year ending 30 June 2025, there will again be 4 months of depreciation charged.

### **Promotional spend**

The H\$26,000 spent on the promotional campaign specific to Store 1 is not directly attributable to any of Store 1's assets and therefore will be expensed to profit or loss over the period of the campaign. If the campaign extends beyond our year-end of 30 June 2025, part of the expenditure could be treated as a prepayment at the year-end and then charged to profit in the next financial year.

### **Bought in goods inventory measurement**

The measurement rule in IAS 2: Inventories is that inventory should be measured in the financial statements at the lower of cost and net realisable value.

Cost includes purchase cost net of trade discounts, any costs of conversion and any other costs necessary to bring the inventory to its present location and condition. Net realisable value is the selling price of the inventory in the normal course of business less estimated costs of completion and any costs necessary for the sale to happen.

Using the information in Table 2, the cost of an alarm will be the purchase cost of H\$7.00, less the bulk discount of H\$0.40 per unit (because the bulk discount is expected to be taken and is effectively a form of trade discount). It will also include the delivery cost for goods in of H\$0.30 per unit because this will be incurred to get the inventory to its present condition and location.

Finally, cost also includes the re-packaging costs as this is a cost of converting the bought in goods into goods that we will sell. The storage costs cannot be included because this is a cost which is incurred after the inventory is in its condition and location ready to be sold.

The net realisable value for an alarm will be retail selling price, less any costs necessary to make the sale (which includes the packaging cost of H\$0.50 per unit and the delivery cost to the website customer of H\$0.80 per unit). At full retail price, net realisable value will be higher than cost as defined above.

However, at the point that an alarm becomes an older version, it will need to be measured at its net realisable value of H\$5.50, less the packaging and selling costs.

## **KPIs to monitor retail store employee performance**

### **Conversion rate**

This KPI will be measured as the number of people entering the store and making a purchase divided by the number of people entering the store in a day, week or month, shown as a percentage. The target conversion level should reflect the fact that we should expect some people to come into a store to browse, but at the same time provide a target that motivates our retail store employees to engage with potential customers and sell our backpacks and accessories.

Ultimately, the reason for having our own retail stores is to increase sales and to boost our profit margins with more direct selling to customers rather than through retailers. It is important therefore that we not only maximise footfall into the store but also ensure that we convert a good proportion of this footfall into sales. This KPI measures the effectiveness of our retail employees' techniques at generating sales and will also indicate how well products appeal to potential customers.

### **Sales per employee**

This KPI will be measured as the sales value per employee in a day, week or month, measured as an absolute value. This will need to be compared to a target set by managers based on anticipated sales in the relevant store and the number of employees available.

This type of measure will act as motivation to the retail sales employees to engage with potential customers and to generate sales for the company. However, care will need to be taken so that all employees have the same opportunities to engage with customers and sell.

### **Add-on sales**

This KPI will be measured as the number of customers buying a backpack that also purchase at least one accessory item divided by the number of customers buying a backpack in a day, week or month, shown as a percentage. This would be compared to a target set by managers, which might reasonably be set quite high, given that the accessories are designed to be complementary to our backpacks.

Clearly, selling accessories will boost the overall level of sales and also generate additional profit and the more customers buying a backpack that buy accessories the better. This KPI will show the effectiveness of retail employees to cross sell across the whole range of products and could be measured on a store and individual employee level.

## SECTION 4

### Sales variances

#### **Sales price variances**

The sales price variances for both Store 1 and Store 2 (except for the sales price variance for the Uffico range in Store 1) are adverse. These adverse variances mean that average actual selling prices were lower than our average standard prices for the relevant range. This will be due to the special promotional discount offered on all backpacks in the first month of trading, as this extra discount was not included in the standard.

The price variance for Uffico is favourable for Store 1, despite the promotional discount, which will have contributed towards an adverse variance. In April, Bee Lloyd endorsed a special design of the Uffico and appeared in Store 1 to promote this. The special design was sold at a higher price than the average for the range and therefore the favourable price variances means that the favourable impact of the higher price for this design is greater than the adverse impact of the promotional discount available in the first month of trading. This special design was not available in Store 2 and hence will not have impacted on the price variance for that store.

#### **Sales mix variances**

The sales mix variances for Store 1 mean that proportionately more Uffico backpacks were sold and proportionately less Capsula and Scrivania backpacks were sold compared to the standard mix. Overall, the variance is favourable, indicating an increase in profit compared to the budgeted mix for the actual quantities sold. This overall favourable variance indicates that Uffico generates a greater standard profit per unit than Capsula and Scrivania.

The change in mix for Store 1 has likely come about because of the influence of Bee Lloyd. Her appearance at Store 1 is likely to have drawn people into the store and her endorsement of the new special design could have encouraged more people to buy that design.

The sales mix variances for Store 2 mean that proportionately more Scrivania backpacks and proportionately less Uffico and Capsula backpacks were sold compared to the standard mix. Overall, the variance is adverse, indicating a decrease in profit compared to the budgeted mix for the actual quantities sold. This also indicates that Scrivania has a lower standard profit per unit than the other two ranges.

The change in mix for Store 2 is likely to be due to the student influencer, Jon Ford, posting a photograph of himself with a Scrivania backpack. Jon is a student and therefore we might expect his greatest influence to be amongst the student population that live in the location of Store 2.

Another reason for the sales mix variances is that the standard mix for each store may be incorrect. For ease, we have set the same standard mix for both stores. However, the stores are located in very different areas. For example, we might expect to sell proportionately more of our cheaper and least profitable range (Scrivania) to the student population surrounding Store 2 and proportionately more of our most expensive and most profitable range (Uffico) to the office workers located near to Store 1.

### **Sales quantity variances**

The sales quantity variance for Store 1 is nil, which means that, in total, the number of Office backpacks sold was exactly the same as budgeted sales. The variance for Store 2 is adverse, which means that, in total, less Office backpacks were sold than budgeted, despite the special promotion in the first month of trading.

The reasons for this shortfall are not clear, although it is possible that the original budget for Store 2 is too optimistic. Given Store 2's location compared to Store 1, we might sensibly expect a lower level of sales overall as students tend to have lower disposal income than office workers. In addition, these variances are for the Office range only and do not consider sales of our EDC range. It's possible the EDC sales are better than sales of the Office ranges.

### **Direct and indirect costs per transaction of our retail service**

#### **Direct costs**

Direct costs are those costs which will vary directly with the number of transactions. This includes the cost of any consumables used per transaction (such as the paper carrier bag and complementary items) and the cost of the retail employee time taken per transaction.

The cost of the paper carrier bag will be easy to establish because we expect each transaction to use one bag and we can easily identify the cost of each bag. In relation to the notebook and pen, on the assumption that the same items are given away each time, this will also be easy to determine as the cost can easily be established.

There will be two activities that make up the direct cost of retail employee time per transaction: demonstration and purchase completion. For both of these activities we would need to establish the amount of time taken per transaction and create a standard for this. This will be difficult as there will be many factors influencing the amount of time that a retail employee takes with an individual customer for an individual transaction. These factors include the number of backpacks or accessories explained and demonstrated and how long each customer takes to make their decision, as well as how many items are included in the purchase.

## **Indirect costs**

Indirect costs are those costs or overheads which do not vary with the number of transactions. There are considerable indirect or overhead costs associated with our retail stores. These include rent, electricity and store management costs, as well as depreciation of the equipment used in stores (such as the electronic card machine readers and the security system) and marketing costs.

Given that we have been operating the stores for 2 months, it is likely that we have some understanding of the overhead costs being incurred. However, it is still early days and therefore there are some indirect costs that will be difficult to determine (such as equipment maintenance costs) because these are still to happen in the future.

In addition, there will be some indirect costs that relate to more than just the retail stores. For example, marketing campaign costs and the salary of Gem Rossi, Sales & Marketing Director, are likely to relate to retail stores sales as well as website and retailer sales. Therefore, we will need to determine an appropriate share of these costs using a suitable base (such as maybe revenue). However, determining a suitable basis may be difficult as any base used is likely to be arbitrary.

Another difficulty is that it will not necessarily be clear whether a cost is direct or indirect. For example, store retail employees will not be 100% engaged with customers because they will also work in the storeroom and restock display areas as part of their duties. Therefore, the cost of these employees will not be 100% direct.

There might also be times when retail employees are idle because there are no customers in store and, therefore, we would need to consider how much time this might be and whether idle time is part of the direct labour standard or treated as an overhead.

Similarly, there will be times when an employee is engaged with a potential customer demonstrating items, but this does not lead to a transaction. Again, there is a question mark over whether this should be included as part of the direct labour standard or as an overhead.

Establishing a suitable absorption base to use to absorb overhead into a cost per transaction is also difficult. There needs to be a cause-and-effect relationship between the overhead being absorbed and the absorption base, and therefore we may need multiple bases. For example, costs associated with the storeroom will be affected by the number of items stored, rather than the number of transactions.

Finally, whatever absorption base is used, there will be difficulties in determining an absorption rate because this will depend on the total level of activity. For example, it will be difficult to determine the total number of transactions expected in the budget period, especially given that we haven't been operating our stores for long.



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## OPERATIONAL CASE STUDY

### NOVEMBER 2024 & FEBRUARY 2025

### EXAM ANSWERS

#### Variant 5

*These answers have been provided by CIMA for information purposes only. The answers created are indicative of a response that could be given by a good candidate. They are not to be considered exhaustive, and other appropriate relevant responses would receive credit.*

*CIMA will not accept challenges to these answers on the basis of academic judgement.*

#### SECTION 1

##### Time series information

##### **What the time series information indicates about demand for cabin bags**

Based on sales of cabin bags in Hland, a trend line and seasonal variations have been established. The trend line shows the relationship between sales volumes and time across the period with seasonal fluctuations in those sales smoothed out. In the trend line, Y represents sales and Q represents the quarter. The first value on the equation represents sales in the base quarter, which is the quarter before the first quarter of 2018. The second value in the equation represents the change in this base level of sales for each quarter. In other words, the trend indicates that sales will change by 5,450 each successive quarter. Given this term is added to the base level of sales, this indicates that there has been an upward trend in sales across the period of the time series.

The seasonal variations show how sales are impacted by the time of year. The values represent the amount by which sales will either be higher or lower than the trend value during a particular period. For example, in the quarter January to March, the analysis suggests that sales will be 12,700 units lower than then trend value determined by the trend line. So, if we consider the period January to March 2025, the time series analysis would indicate that trend sales would be 309,650 ( $= 151,600 + 5,450 \times 29$ ) and forecast sales after seasonal variation adjustment would be 296,950 ( $= 309,650 - 12,700$ ). The seasonal variations shown in Schedule 1 indicate that, across a year, we can expect sales in April to June to be higher than in any other quarter, although the variations are not that significant when considered against the absolute values shown above.

## **Usefulness of this information for determining a forecast**

We can use the trend line and seasonal variations to create a forecast for 5 months, from February to June 2025, by extrapolating outwards from the analysis data to determine the size of the market as a whole in Hland. From this, we can then determine a forecast for our sales based on the percentage share of the market that we expect to gain. The trend line and seasonal variations are based purely on sales in Hland, and therefore this would appear to be a good base for our forecast given that we will only be selling our cabin bags in Hland during the forecast period.

However, there are some issues that need to be taken into consideration about the information, which may limit the accuracy of our forecast. Firstly, the trend line and seasonal variations are based on historical data for a 6-year period, which is already almost a year out of date. Just because something has happened in the past does not mean that it will continue into the future and therefore any forecast using this data also needs to be supported by specific market research into this market.

Secondly, we have established a single trend line and a single set of seasonal variations across the entire period of the time series, which spans 6 years. It's possible that, within the 6 years, there have been multiple trends and that this trend line does not represent the latest trend in sales. Given that across the period many airlines changed their rules to encourage the use of cabin bags, it's possible that the growth in the market has now peaked and that the market could even be declining rather than growing.

Thirdly, the base information used here is for all cabin bags, which will include premium as well as budget brands. At BackOffice, we are a premium brand and, as such, the trend reflected here might not be representative of our section of the market.

## **Importance of revising budgets for planning and control purposes**

### **Planning**

Our budgets are our plans for the future. The budgets for the year ending 30 June 2025 were prepared excluding the impact of the new cabin bag range. Revising these budgets will make us look ahead and will help us to plan for the expansion of the activities required.

For example, we can revise the cash budget to reflect the impact of the new range on receipts from customers and retailers as well as the extra expenditure needed for assets and employees. From this, we can identify whether there are likely to be any cash deficits and ensure that we have sufficient funding in place to support this.

Another example is that by looking ahead and understanding our plan for sales volumes, we can plan production and ensure that there is sufficient raw material inventory in place at the right time to support this.

## **Control**

Our budgets provide the plan against which our actual results can be compared in the future. If we do not revise our budgets for the impact of the new range, it means that we will not have a meaningful starting point against which to evaluate our performance when we do start manufacturing and selling the new cabin bags. For example, we will be investing in new equipment and employing more indirect workers, both of which will increase our fixed production overheads. If this change is not reflected in the budgets, we will report significant adverse variances, which may potentially be blamed entirely on the change, even though other control issues could be hidden within the variance.

## **Prompt payment and bulk purchase discounts**

### **Impact on investment in working capital**

Our investment in working capital for our new cabin bag range is measured as our inventory balance plus trade receivables balance less our trade payables balance, specific to the range.

If we take advantage of prompt payment discounts from our suppliers, this means that we will pay these suppliers earlier than their standard credit terms. This will reduce payables, increase the length of the operating cycle and increase our investment in working capital. Payables are effectively a form of free short-term finance used to support our investment in inventory and receivables.

If we take advantage of bulk purchase discounts, at the point of receipt, this will increase our investment in inventory but will also increase the amount of payables to compensate, both of which will reflect the impact of the bulk discount itself. Over time, as this inventory is used up, inventory values will fall until we replenish with another order. This is likely to lead to fewer orders across a year, but will increase the average level of inventory held, which increases the investment in working capital.

### **Issues to consider**

The first issue to consider for both types of discounts is whether they are financially worthwhile by evaluating whether there is a net financial benefit. For the prompt payment discount, we will gain the benefit of the discount itself (which will reduce the cost of the materials purchased), but this will be at the expense of having to finance the higher level of investment in working capital. For the bulk purchase discount, the benefit will again be the discount received (reducing our purchase costs) but again at the expense of increased financing costs.

We also need to consider any non-financial factors that could impact the decision. For example, do we have enough storage capacity if we buy in bulk, given that there are no plans to increase the size of the Production Facility itself. In addition, is there any risk of inventory being damaged if we end up holding it for longer, especially if fabrics are not stored properly?

## SECTION 2

### **Accounting treatment of the lease**

In accordance with IFRS 16: Leases, we will need to record a lease liability and a right-of-use asset.

#### **Lease liability**

The lease liability will initially be measured and recorded at the present value of the lease payments that are unpaid at the commencement of the lease. The discount rate to use should be the interest rate implicit in the lease, which is 9% for this lease. The unpaid lease payments include fixed lease payments and any amount expected to be paid by the lessee under residual value guarantees.

For this lease, the lease liability will be initially measured as the present value of the four payments of H\$60,000 starting on 31 December 2025 plus the amount payable under the residual value guarantee. This final amount will be the difference between the guarantee amount of H\$40,000 (which represents the guaranteed value of the machinery on 31 December 2028) and H\$25,000, which is the expected residual value on that date.

For the year ending 30 June 2025, the lease liability will be increased by a finance charge of 9% of the initial lease liability, pro-rated to reflect the fact that 6 months of interest will relate to this financial year. This will be charged to profit or loss and reduce profit for the year. At 30 June 2025, the lease liability will be split into a current liability and a non-current liability.

#### **Right-of-use asset**

The right-of-use asset will initially be measured at the initial measurement value of the lease liability plus any lease payment made at the start of the lease plus any direct costs incurred by the lessee. As payments for this lease are in arrears, the initial value of the right-of-use asset will be the initial lease liability plus the lease arrangement fee paid on 1 January 2025 of H\$2,500.

The right-of-use asset will be depreciated in line with the principles of IAS 16: Property, Plant and Equipment. Because the lessor will own the machinery at the end of the lease term, the depreciation period will be the lower of the lease term and the useful life of the asset and therefore 4 years. For the year ending 30 June 2025, this will result in 6 months of depreciation being charged to profit or loss with the initial value of the right-of-use asset reduced by the depreciation. Depreciation will be for 6 months because the machinery is available for use from 1 January and this is the relevant date, not the date that it starts to be used. The asset will be included as part of non-current assets.

## How an ABC approach will differ from our current costing approach

### **Current approach**

We currently use an absorption costing approach, whereby overhead costs are identified as either variable or fixed. A variable overhead is an indirect cost which varies in proportion to units produced (for example, power costs) and a fixed overhead is any other overhead (for example production managers' salaries). This presumes that it is possible to separate overheads into variable or fixed.

These variable and fixed overheads are absorbed into a unit of production using an overhead absorption rate, based on direct labour hours. For our Cutting Department, these rates are H\$2.42 per direct labour hour for variable and H\$7.26 per direct labour hour for fixed overheads in our current budget. This is based on the idea that direct labour hours have a causal link to the incidence of the overhead, although this might not actually be the case for all overhead costs.

### **Activity based costing (ABC)**

If we used an ABC approach, we would first consider all of the production processes in detail and identify the overhead costs. For example, laser cutting will incur power costs and set up costs for the machine. Each item of overhead cost will need to be identified and listed, although, unlike absorption costing, there is no need to separate these into either variable or fixed costs.

Instead, we need to consider what causes the overhead, that is, what activity 'drives' each cost. Costs that have the same cost driver can be grouped together in the same cost pool and the cost per driver calculated. This will tell us that each time that activity named in the cost driver is carried out there will be causal link to the cost. This has benefits for both planning and control.

Applying this to the Cutting Department for the three processes:

<b>Process</b>	<b>Costs and cost drivers</b>
Moving	The costs of doing this are the forklift driver's wages and the costs of operating the forklift truck (for example, power and depreciation). Given that the forklift truck is also used in the stores, we would only need to include the Cutting Department's share of the total cost of operation. The activity that causes these costs to be incurred for the Cutting Department will be a delivery of fabric rolls into the department. Given that this is four rolls of fabric at a time, for specific batches of production and that each batch of production requires two rolls, a suitable driver will be per delivery.

Laser cutting	The costs of laser cutting include the costs of operating the laser cutting machine (for example, power and depreciation) as well the costs of setting up the machine before a production batch (for example, indirect labour costs). The cost of operating the machine will be driven by the number of pieces that need to be cut and perhaps the complexity of the cutting required. This is likely to be different for a batch of each type of product given the different batch sizes and the different number of pieces that need to be cut. Therefore, a suitable cost driver might be machine hours. However, for set-up costs, as this is carried out for each batch, and presumably takes the same amount of time per batch, a suitable cost driver will be per batch.
Edging	The costs of edging will again be the costs associated with operating the equipment plus any indirect labour required. Each product type requires a different number of pieces to be edged, although each piece edged takes the same amount of time. Therefore, a suitable cost driver here will be per piece edged.

## SECTION 3

### **Accounting treatment of damaged sewing machine**

The fact that the sewing machine has been damaged is an indicator that we need to consider whether there has been an impairment in the value of the asset. The sewing machine asset will be impaired if its carrying amount is higher than its recoverable amount. Its recoverable amount is the higher of its fair value, less costs to sell and its value in use.

The carrying amount of the sewing machine is H\$35,600. Its recoverable amount is the higher of H\$11,500 (fair value of H\$12,500 less costs to sell of H\$1,000) and H\$14,000, its value in use. This value in use figure is based on the value to be derived from using the sewing machine for spares and represents the potential future cost saving. Therefore, as the recoverable amount of H\$14,000 is lower than the carrying amount of H\$35,600, there is an impairment equivalent to the difference. This will reduce profit for the year and also reduce the carrying amount of property, plant and equipment.

Note that the asset will remain as part of property, plant and equipment as it does not meet the definition of an asset held for sale because we plan to keep the asset rather than sell it. The asset will continue to be depreciated with the depreciation charge from 1 April 2025 being calculated as the new carrying amount divided by the remaining useful life from that date.

### **Decision about replacement machinery**

#### **Maximax**

The maximax criterion involves choosing the supplier which maximises the maximum payoff available. A decision maker using this criterion is an optimist and hopes that the best will happen and is prepared to take the chance that it does not happen. They will therefore choose the best outcome.

From the payoff table, we can see that the best outcomes will occur when there is high demand for cabin bags because this is where profit for the 6 months is highest for all three suppliers. The best of these outcomes is for Supplier 3 at H\$3,920,000 and, hence, under this criterion, this supplier would be chosen.

#### **Maximin**

The maximin criterion involves choosing the supplier which maximises the minimum payoff available. A decision maker using this criterion is a pessimist that fears that the worst will happen and protects themselves against the chance that this will happen. They will therefore choose the option which gives the best result when the worst happens.

From the payoff table, we can see that the worst outcomes will occur when there is low demand for cabin bags because this is where profit for the 6 months is the lowest for all three suppliers. The best of these outcomes is for Supplier 1 at H\$1,455,000 and, hence, under this criterion, this supplier would be chosen.

### **Minimax regret**

The minimax regret criterion involves choosing the supplier that minimises the maximum regret; in other words, the best of the worst outcomes. Regret is defined as the opportunity cost of making the wrong decision and this approach is used by a decision maker that is a sore loser and is worried about making a wrong decision.

Regret is calculated as the difference between the best outcome at each of the different possible levels of demand and each of the alternative suppliers. For example, if demand is low, the best outcome is Supplier 1. The regret of choosing Supplier 2, should demand be low, is H\$13,000 (calculated as H\$1,455,000 – H\$1,442,000).

The maximum regret for each supplier is: H\$40,000 for Supplier 1, H\$13,000 for Supplier 2 and H\$35,000 for Supplier 3. Therefore, we would choose Supplier 2 as this offers the minimum maximum regret of the three suppliers available.

### **Linear programming**

#### **Graph 1 and confirming optimal solution**

Lines A and B on Graph 1 show all possible combinations of production of CB1 and CB2 which use all of the available specialist fabric and sewing machine hour resources. Lines A and B represent the maximum that can be produced and form a boundary for the feasible region for production which will be to the left of these lines. It is impossible to produce above these lines based on the resources available.

Lines C and D on Graph 1 are the demand constraints and represent the maximum number of cabin bags required to be produced. Line C indicates that maximum required production for CB1 is 2,000 units and Line D indicates that maximum required production for CB2 is 3,000. The feasible region for production will be to the left of line C and underneath line D. The feasible region is the area of the graph which starts at the origin and is contained by lines A, B and C.

The optimal production plan, based on moving the iso-contribution line to the furthest part of the feasible region, has been identified as around 1,500 CB1 and 1,850 CB2 (where lines A and B intersect). To prove that this is the optimal solution (rather than where lines B and C intersect, where line A crosses the y axis or where line C crosses the x axis), we can calculate the contribution that would be generated at each possible solution to check that where lines A and B intersect gives the highest contribution. Alternatively, we could use simultaneous equations based on the two constraints, which will give us the optimal solution.

## **Additional fabric**

Assuming that we confirm that the optimal solution is where lines A and B intersect, this means that both specialist fabric and sewing machine hours are binding constraints. To determine whether it is worthwhile buying additional specialist fabric, we need to consider whether the price charged would be worth it.

The maximum price that we would be willing to pay for each square metre of specialist fabric is its shadow price (which is the amount of additional contribution from having one more square metre) plus its normal price. The shadow price of the specialist fabric has been established as H\$6.43, and this therefore represents the maximum premium above our normal price that we would be prepared to pay. We are told that the additional cost per square metre is H\$5.50 and therefore it would be worthwhile buying additional fabric.

We can use Graph 1 to help us determine the amount of fabric to purchase. As we purchase additional fabric, line A on the graph will move away from the origin. Given that line B is fixed, the maximum that we would want to move line A is to the point where it will intersect with lines B and D. This then becomes the new optimal solution of 3,000 CB2 and around 750 CB1. The amount to purchase will be the difference between the square metres required for the new optimal solution and square metres required for the old optimal solution. It would not be worth buying any more of this specialist fabric because line A would move outside of the feasible region.

## SECTION 4

### Variances for the Cutting Department

#### **Raw material variances**

The raw materials price variance is H\$31,500 favourable, which means that, on average, we paid less per square metre for fabric than our standard prices. We changed some of our suppliers during April and May as a result of poor availability and quality issues. It would appear that the effect of losing bulk purchase discounts was outweighed by the effect of the introductory discounts which will have lowered the cost per square metre. This is a temporary effect though, as these introductory offers have now ended and so for future periods, we will need to adjust the standard to reflect the loss of bulk discounts.

The raw materials usage variance is H\$50,400 adverse, which means that, on average, we used more fabric than we should have (based on our standard) for actual production levels. We know that there were some issues with fabric quality at the start of the period and therefore this might have resulted in a higher level of wastage. Additionally, we have recruited a number of new inexperienced direct employees that were trained on the job and it's possible that wastage was higher as a result of this lack of expertise in either the cutting process or the edging process.

#### **Direct labour variances**

The direct labour rate variance is H\$14,000 favourable, which means that, on average, we paid less per hour for direct labour than we expected to, based on our standard. We had to employ new people during the period as a result of a higher-than-usual level of employees leaving and many of these were inexperienced. It's likely that the rate of pay for these inexperienced workers was lower than for the experienced workers that left, resulting in an overall reduction in the average rate.

The direct labour idle time variance is H\$10,800 adverse, which means that we paid our direct employees for hours where they were not being productive. There was disruption in the department at the start of the period when some machinery was damaged and there was a delay in new machinery being installed. This is likely to have resulted in idle time, through no fault of the employees. In addition, given many of the new inexperienced employees were trained on the job, this will have also created idle time for both the employees being trained and the trainers.

The direct labour efficiency variance is H\$39,800 adverse, which means that our direct employees took more productive time than we expected them to, based on our standard, for the actual level of production.

This could be a result of employing the new employees, as many of these employees were inexperienced and therefore likely to work at a slower rate, certainly initially, than the experienced employees that they replaced. In addition, the issues with the machinery could have slowed employees down if the new machinery was calibrated differently. Given the higher than usual level of employees leaving, an adverse efficiency variance could indicate dissatisfaction amongst workers.

### **Fixed overhead variances**

The fixed overhead expenditure variance is H\$13,400 adverse, which means that more was spent on fixed production overheads than had originally been budgeted for the period. We recruited a new supervisor during this period and their salary would have contributed to the additional cost. In addition, there were issues with machinery at the start of the period and there may well have been additional maintenance costs as well as additional costs related to new machinery.

The fixed overhead efficiency variance is H\$21,112 adverse, which means that we used more direct labour hours for actual production than we should have done based on our standards. Given that fixed overheads are absorbed on the basis of direct labour hours, the reasons for this adverse variance are exactly the same reasons as those given for the direct labour efficiency variance.

The fixed overhead capacity variance is H\$30,160 favourable, which means that more direct labour hours were worked than budgeted, reflecting an increase in the capacity of direct labour. This increase is due to the additional direct employees taken on which meant that the capacity of the department was increased to accommodate a higher level of production.

### **KPIs for the Cutting Department**

The percentage of fabric scrapped is a suitable KPI to measure performance of the department because scrapped fabric is waste and therefore a direct cost to the business. Whilst the nature of our product means that we have to cut the pieces required from fabric rolls, we should be aiming to maximise the number of pieces that we can cut from each roll and thereby reduce the amount of waste fabric. This is also important for the sustainability of our operations. Across the period, there has been an improvement, such that in June, performance was actually better than target. Poor performance in April and May is likely due to the machinery issues and also the use of inexperienced workers as noted above for the material usage variance. It might also have been due to the poorer quality fabric received prior to changing suppliers.

The percentage of scrapped fabric sent for recycling is a suitable KPI to measure performance of the department because it is a measure of how sustainable our operations are. We have an aim to be carbon neutral by 2030 and sustainability is important to our brand reputation. Our aim of recycling 95% of fabric off-cuts is an important part of driving sustainability in our operations. We have a high target and across the period have not met this. There is a clear reduction in May, possibly due to a lack of awareness given the number of new employees in the department. There

was also a higher amount of scrapped fabric in April and May and possibly the channels that we use to recycle the fabric could not cope with the amount scrapped.

The percentage of direct employees retained is a suitable KPI to measure performance of the department because it is a measure of employee satisfaction. We will always expect some degree of employee movement (hence why the target is 95% and not 100%), but it is important that this is minimised, as dissatisfied employees typically are less motivated to do a good job. In addition, a high retention rate avoids the disruption of recruiting and training new employees. As seen in the variance analysis above, the direct labour idle time and efficiency variances are in part caused by the new employees and this is a cost to the business. The lower level of retention in April and May corresponds with what we know about employees leaving and us having to recruit new employees. It's good to see that, in June, retention is at 100%.



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## OPERATIONAL CASE STUDY

### NOVEMBER 2024 & FEBRUARY 2025

### EXAM ANSWERS

#### Variant 6

*These answers have been provided by CIMA for information purposes only. The answers created are indicative of a response that could be given by a good candidate. They are not to be considered exhaustive, and other appropriate relevant responses would receive credit.*

*CIMA will not accept challenges to these answers on the basis of academic judgement.*

#### SECTION 1

#### **Production overhead variances for the Production Facility for November 2024**

##### **Expenditure variances**

The variable production overhead expenditure variance is H\$3,584 adverse, which means that, overall, we spent H\$3,584 more on variable production overhead than we should have for the actual hours worked.

There was significant unplanned overtime worked in the month because of the higher-than-expected level of production. The overtime premium associated with this will have increased the expenditure on variable overhead above the standard cost for actual hours worked and contributed to the adverse variance. However, we also know that electricity cost reduced in the month as a result of the new wind turbine. The impact of this will be to create a favourable variable overhead variance. It would appear that the impact of the additional overtime premium outweighs the impact of cheaper electricity costs, given that the variance is adverse overall.

The fixed production overhead expenditure variance is H\$21,600 adverse, which means that we spent more than we had budgeted to spend in the month. This variance has a different meaning to the variable overhead expenditure variance because it is measured against originally budgeted fixed costs. This adverse variance means that additional costs that were not anticipated when the original budget was set have been incurred.

There will be multiple reasons for this variance given that fixed overheads include many different types of cost. Based on the information provided though, key reasons for the additional spend are the wages of the extra supervisors appointed, the cost of

hiring additional equipment as well as the overhead costs associated with the wind turbine (such as depreciation), given that this wasn't budgeted for originally.

### **Efficiency variances**

The variable and fixed production overhead efficiency variances of H\$2,138 and H\$6,395 respectively are both adverse, which means that it took more direct labour hours to complete actual production than standard. The meaning of these two variances is the same because both are calculated as the difference between the standard direct labour hours needed for the actual output and the actual direct labour hours worked multiplied by the appropriate standard absorption rate per hour. This variance measures the efficiency of the absorption base which is direct labour hours.

It would appear that direct employees took longer to produce 10,500 backpacks than they should have based on the standard. It is possible that the new direct employees worked at a slower rate than expected whilst they learnt the processes. There was also new equipment installed and it's possible that it took time for direct employees to learn how to operate this equipment, which also slowed them down.

### **Capacity variance**

The fixed overhead capacity variance of H\$19,812 favourable means that more direct labour hours were worked than originally budgeted, reflecting an increase in the capacity of our direct labour resource.

This increase is due to the increase in the number of direct employees and also the unplanned overtime that was worked. Note that the fixed overhead production efficiency and capacity variances added together give a favourable volume variance. This is due to higher production of backpacks than expected in November.

### **Benefits of a digital costing system for the business**

If we implement a digital costing system, it would create fully integrated links between our internal systems as well as automated links to our suppliers, retailers and the internet.

### **Potential benefits of integrated internal systems**

The ability to link our internal sales, purchasing and production systems will allow us to improve the efficiency of production. Table 2 indicates that, with a digital costing system, we might expect to improve labour idle time from our current level of 5% to around 1%, presumably as a result of improved production scheduling from the integration. This will reduce the number of unproductive hours that we pay for, which also reduces the need for overtime to be worked or to increase the workforce, both of which increase costs.

The ability to integrate our internal systems should also allow us to reduce waste. Table 2 indicates that textile companies using a digital costing system achieve a very

low textile wastage rate of 2%. Our levels of textile waste are already relatively low at 4%, presumably as we use lasers to cut out fabric pieces, which are programmed to do this as efficiently as possible. However, integrating our product design system with production systems could potentially increase this efficiency even further. This will help us to achieve our sustainability aims.

Greater automation between internal systems will also reduce hard copy paperwork, lead to efficient flow-through of products, better coordination, less bureaucracy and therefore less cost. It will also allow us to record and monitor costs and the activities driving cost in far more detail than we currently do. This in turn will allow us to improve control over costs and to eliminate any unnecessary activities.

### **Potential benefits of automated external links**

Having automated external links would allow us to gather information from the internet in real-time allowing automated systems to review the whole market to find suitable raw material inputs. At present, we update budgets and standard costs only once a year. If we used a digital costing system, this would change and we would be able to react quicker and more appropriately to changes in costs. This in turn would allow for better performance evaluation as our standards will be continually updated to reflect the current situation.

Table 2 shows that we expect the number of suppliers that we use to increase considerably over the next year as our new product ranges come online. However, companies in the textile industry using digital costing systems have a much higher average number of suppliers at 182 compared to our predicted number based on our non-digital system of 103. Therefore, a benefit of being able to have automated external links is that we could potentially have access to a larger number of suppliers. This would mean we could source the cheapest raw materials and consumables. In terms of raw materials this would be particularly relevant for cotton fleece, padding, thread and accessories, which are currently sourced from a range of different suppliers. For ballistic nylon and zippers though, we might wish to keep our current supplier relationships.

Having automated links with all of our suppliers could lead to a significant reduction in lead time. Without a digital costing system, we anticipate our lead time to increase over the next year to around 16 days as we bring in new suppliers, presumably as a result of where those suppliers are located. With a digital costing system and automated links, we could potentially reduce this significantly, as the industry average is only 2 days. Lower lead times would reduce the need to hold raw material inventory and would therefore lower our investment in working capital. In addition, the automated supplier links could increase the accuracy and efficiency of ordering raw materials. These links can monitor inventory holding, trigger purchase orders automatically when the reorder level is reached and even transfer some of the inventory holding costs from us to the supplier.

There are also benefits of having automated links with our retailers. Table 2 shows that we expect to more than double the number of individual products what we sell over the next year. Having automated links with retailers will allow us to understand

their buying intentions in real time and plan production in the most efficient way to reduce cost.

## SECTION 2

### **Determining credit limits for retailers**

Credit limits refer to both the amount of credit we will allow a retailer as well as the length of time we will allow them to pay (the credit term). When setting credit limits, we need to consider two main factors: the size of the retailer and their ability to pay.

#### **Size of the retailer**

Considering the size of the retailer will allow us to estimate the number of backpacks we can expect to sell to them. The amount of credit given needs to be sufficient so that the retailer is able to place the orders that they want, but not so much that we have an unacceptable increase in our exposure to irrecoverable debts should the retailer have financial difficulties. The size of the retailer may also influence the credit terms, as we might want to give longer terms to a large retailer as an incentive to buy more from us.

Table 1 indicates that GlamHouse is a department store chain with 150 stores and PW Finns is a bag store chain with only 32 stores. Just based on the number of stores, GlamHouse appears to be a larger retailer, although, given our backpacks would be competing with lots of other products in store, it's possible that our backpacks would not be stocked in all stores. More information is required to assess likely order sizes for each retailer.

#### **Ability to pay**

Perhaps the most important factor to consider is the risk that the retailer will not pay us. Obviously, the higher the amount of credit given, the larger the impact on profit if the retailer fails to pay us. In addition, the higher the risk of the retailer not being able to pay at some point in the future, the shorter the credit terms need to be to limit exposure. To assess the risk of a retailer not paying us, we need to consider their creditworthiness, using information such as financial statements and press reports.

When assessing creditworthiness, it is important to consider how the retailer manages its working capital and how this might affect its liquidity and therefore its ability to pay. Table 1 shows that GlamHouse has a much higher inventory days than PW Finns at 148 days to 72 days. This is possibly as a result of the broad range of products that it will hold in inventory, but does indicate that GlamHouse has more finance tied up in inventory than PW Finns, which could be detrimental to its liquidity.

GlamHouse also takes longer to pay its suppliers, at over 3 months compared to just over 2 months for PW Finns. This could be because it has negotiated extended credit terms but might also be because it lacks the cash resources to pay its suppliers on time. The impact of these different inventory and trade payables days on liquidity is difficult to determine without additional information.

### **Other information**

The other information that would be helpful when assessing the creditworthiness of GlamHouse and PW Finns is as follows:

Liquidity position	It will be important to look at the liquidity position of each retailer, in terms of its cash balance and whether it operates with an overdraft. Retailers sell goods direct to customers, usually not on credit, which means that we would expect such businesses to have healthy cash flow. If one of these retailers is operating with an overdraft, this could act as a red flag that the retailer has poor liquidity, which would limit our view of its creditworthiness.
Standard credit terms	We also need to establish the normal credit terms available to both of these retailers. GlamHouse is a department store chain and it's possible, given the likely size and power of this business, that it has negotiated longer payment terms than PW Finns. Payable days of 92 days, which, although long, could be in line with the terms negotiated rather than an indicator that the creditworthiness of GlamHouse is an issue. Although if terms are significantly lower than 92 days, this would potentially give us pause for concern, because this could indicate that GlamHouse is struggling to pay its suppliers.
Sales growth	It will also be important to establish how sales for each retailer have grown over, say, a 5-year period. If sales are declining, this could be an indicator that the retailer may struggle to continue to trade in the future, which will affect its ability to pay for our goods. On the other hand, a high level of growth could indicate that the retailer is perhaps growing too fast and might run the risk of running out of funds.

### **Key performance indicators**

**Percentage of goods dispatched invoiced.** This is measured as the total value of sales invoices divided by the total value of good dispatched in a week or month, expressed as a percentage. The target here should be very high to reflect the fact that invoices should be raised as quickly as possible after despatch of goods. The new credit controller will be responsible for raising invoices and therefore it is appropriate to hold the credit controller responsible for this measure. Every day that a despatched sales order is not recorded as a sales invoice is a day's free credit to the retailer.

**Percentage of balances overdue.** This is measured as the total balance due from retailers that is beyond the agreed credit terms divided by the total balance due from retailers at the end of each week or month, expressed as a percentage. The target here should be as low as possible, as we should be seeking to ensure as far as possible that retailers pay on time to protect our own liquidity position. It will be important to also review this KPI over time to assess whether it is increasing (in which case the credit controller could do more to chase payment) or decreasing (in which case the credit controller is doing a good job). Monitoring this measure may act as a motivator for the new credit controller.

**Percentage of irrecoverable debt.** This is measured as the total value of debt written off divided by the total value of credit sales in a week or month, measured as a percentage. The target for this measure should be close to zero as, ideally, we do not want any irrecoverable debts, since this is a loss for the business. Our new credit

controller will be involved in assessing the creditworthiness of new retailers, although presumably not completely responsible for this. Therefore, it will be important that the credit controller is only held accountable for those factors that they do control.

**Retailer query close time.** This will be measured as the average amount of time to close retailer queries each week or month. This will be compared to a target time that reflects an appropriate time frame based on the expected complexity of the queries. The credit controller will be responsible for dealing with retailer queries on invoices and it is important that these are dealt with as promptly as possible so that the retailer does not have a reason to delay payment.

## SECTION 3

### Activity based budgeting for Byland Distribution Centre

Activity based budgeting (ABB) is an approach where a budget is created by first considering the activities which drive cost and then estimating the costs that will need to be incurred so that those activities can happen.

In this case, we are looking to create an employee cost budget for the Byland Distribution Centre and, therefore, in the first instance, we need to consider each of the activities we expect the employees to do. Schedule 1 includes two activities, moving goods into inventory and picking goods for despatch, but there will be others as well.

The next step is to consider each activity separately and to determine the employee time that we expect to need for each of these activities for the budget period. For each activity, we need to determine the factor that drives the cost (the cost driver) and the time taken to complete a cost driver.

Using the two activities identified in Schedule 1:

Moving goods into inventory	<p>Moving goods into inventory involves checking a pallet against the internal order and then moving that pallet to multiple locations within the storage area where the backpacks are manually unloaded into the correct location.</p> <p>Schedule 1 indicates that most pallets will include 10 different types of backpack so, on the basis that it is reasonable to assume that each pallet will require the same number of stops to unload, we could use number of pallets as our cost driver. This is because each pallet would take the same amount of time to check, move and unload.</p> <p>The total hours required would be the number of pallets to be moved in the budget period multiplied by time taken per pallet to check and unload.</p>
Picking goods for despatch	<p>Each order will be picked separately and therefore we might consider using number of orders as the cost driver. However, based on the information in Schedule 1, it is likely that each order will take a different amount of time because of the size of the order and also the number of different types of backpack included on the order.</p> <p>We need to use a cost driver that reflects the factor that most influences the amount of time picking a pallet will take. Given that most of the time will be taken up moving between locations to be able to pick each type of backpack, then an appropriate cost driver</p>

	<p>might be number of movements, which will be determined by the number of types of backpack to be picked.</p> <p>The total hours required would be the total number of movements required to pick orders in the budget period (based on an estimate of the number of types of backpack included in each order) multiplied by the time taken to pick a single type of backpack.</p>
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Having established the cost drivers and time required for each individual activity undertaken by the employees in the Byland Distribution Centre, the next step is to accumulate all the hours required for all of the activities into a total number of hours required for the budget period. We might also want to factor in an allowance for idle time.

The final total can then be used to establish how many employees are required based on the number of hours each employee would be available for work during the year. This would need to include any hours needed for training and allowances for sickness and employee holidays.

The final step would be to quantify this as a cost by applying the appropriate hourly rate for the employees required (which should include any social security or pension costs borne by the company in respect of these employees).

### **Potential difficulties and potential benefits of using ABB for this budget**

#### **Potential difficulties**

A potential difficulty is establishing the level of detail to use for activities to enable us to determine suitable cost drivers. In the explanation above, picking goods for despatch has been treated as a single activity; however, we could consider breaking this down into multiple activities because different factors influence the time taken at different points of the process. For example, each order requires loading of a pallet onto the forklift truck and, as this takes the same time regardless of the order, this could be viewed as its own activity with number of orders as the cost driver.

A second potential difficulty is establishing the time taken per cost driver and indeed the number of cost drivers that will happen in the budget period. This is a new Distribution Centre in a new market and, at this stage, there will be considerable uncertainty over the number of orders, let alone the complexity of those orders. In addition, the centre isn't operating yet and therefore the time taken to upload or pick goods will at this stage only be a guess.

## **Potential benefits**

A potential benefit is that it will mean that the budget for employee costs is based on a detailed analysis of the activities that have to happen in the Distribution Centre. An ABB approach identifies the level of resource required to complete the activities which will help to reduce the chance of the budget for this new operation containing inefficiencies or budget slack.

A second potential benefit is that ABB, because of the detailed focus on activities, helps us with cost control. By looking in detail at the activities involved in all aspects of the Distribution Centre, we may identify opportunities to streamline those activities and possibly even eliminate some activities. For example, depending on the types of backpack that are likely to be most commonly ordered, we could design the storage area so that these are located next to each other, potentially reducing the amount of time required to unload and also pick orders.

## **Sensitivity analysis on the initial budget for the Byland operations**

### **The sensitivity information**

The sensitivity measures shown in the second table of Schedule 2 reflect how much each of the budget items (selling price, sales volume, cost of goods sold per unit, operating costs and marketing costs) would need to change to move from a budgeted profit to a budgeted loss in Byland during the period.

This is on the assumption that only one budget item is changed at a time and other budget items remain as initially budgeted. The lower the sensitivity percentage, the greater the sensitivity of profit to a change in that item.

The sensitivity measures show that the most sensitive budget item is selling price: this would need to drop by only 4% to change the budgeted profit to a budgeted loss (assuming that all other budget items are unchanged). The table also shows that the operating costs of the Distribution Centre are the least sensitive of the budget items: they would need to increase by 29.5% before a loss was generated.

These are two of the items where there is still uncertainty over the final figures. Understanding that sales prices dropping by 4% would result in a loss, is useful information because it may guide our decision making about the level of any extra discounts to offer. However, this sensitivity measure is based on the assumption that a reduction in selling price has no impact on volumes sold, which is unrealistic. In contrast, there is scope for the Byland operation costs to increase by 29.5%, although, again, this assumes that all other budget variables stay the same.

## **Why the sensitivities differ**

There are two inter-connected reasons why the level of sensitivity differs: the impact of each item on contribution and the absolute value of the item in relation to budgeted profit.

For example, if we reduce selling price, both revenue and contribution will decrease in absolute terms and the contribution margin will also decrease. A reduction in sales volume will reduce revenue, but will also reduce variable costs, leading to a smaller reduction in contribution in absolute terms and no change in contribution margin. Therefore, the sensitivity of selling price (4%) will always be greater than the sensitivity of sales volume (7.8%).

The sensitivity of cost of goods sold per unit is also less than for selling price because selling price per unit is higher than cost of goods sold per unit in absolute terms. Therefore, a smaller percentage reduction in selling price is needed to change budgeted profit to budgeted loss.

Similarly, the fixed operating costs have the least sensitivity because the value of fixed costs in absolute terms is less than the value of either revenue, total variable costs or marketing costs.

## SECTION 4

### Classification and measurement of the laser cutting machine

#### **Classification**

The laser cutting machine ceased to be used on 1 May 2025. Given our plans to sell the machine, we need to consider whether it can be reclassified as an asset held for sale and, if so, at which point.

Reclassification of an asset as an asset held for sale occurs at the point that the asset is available for immediate sale in its present condition and where its sale is highly probable.

A sale is highly probable when: management are committed to sell the asset; there is an active programme to find a buyer; the asset is marketed at a reasonable price; the sale is expected to take place within 12 months; and it is unlikely that the plan to sell the asset will change.

The laser cutting machine will be available for immediate sale in its present condition, only at the point that the inspection has been completed and the safety certificate received. This is expected to be at the end of May.

We have already engaged the services of an agent to sell the machine, and therefore this indicates that management is committed to the sale and that it is unlikely that the plan to sell the asset will change.

The agent will start to market the machine on 1 June, and therefore, from this date, there will be an active programme to find a buyer, and presumably this will be at a reasonable price.

In addition, the agent expects to sell the machine within 6 months. Therefore, it would appear that from 1 June 2025, the criteria for reclassification as an asset held for sale will be met.

#### **Measurement**

The laser cutting machine will continue to be depreciated until the date that it becomes held for sale, which is 1 June 2025. At that date, the value that the asset held for sale will be recorded at will be the lower of its carrying amount and fair value less costs to sell.

The carrying amount of the laser cutting machine will be H\$41,200 – H\$820 (depreciation for May). Fair value less costs to sell will be H\$35,000 less H\$500 (the costs of the inspection) and also less H\$4,000 (the selling costs).

Given that fair value less costs to sell will be lower than the carrying amount, we will write down the asset value to fair value less costs to sell, with the difference from the carrying amount charged to profit or loss. There will be no further depreciation of the asset after reclassification as an asset held for sale.

### **Measurement of sewing machine**

The damage to the sewing machine was repaired at a cost of H\$3,400. This repair has brought the sewing machine back to its original operating capacity, rather than providing any enhancement to its operating capacity.

In accordance with IAS 16: Property, plant and equipment, this means that the expenditure of H\$3,400 will need to be charged to profit or loss, as we will not be able to capitalise subsequent expenditure on an asset which does not enhance its benefits.

The sewing machine will continue to be depreciated. However, we have reassessed the useful life of the machine to the business and therefore the depreciation charge needs to be recalculated.

The new monthly depreciation charge will be calculated as H\$16,800 – H\$5,600 (expected residual value) divided by 18 months. For the year ended 30 June 2025, we will include depreciation at the original monthly amount for 10 months and depreciation at the new monthly amount for 2 months.

### **Order size decision under different risk attitudes**

#### **Risk seeking**

A risk-seeking decision-maker will choose the best possible outcome no matter how likely it is that it will occur. From the payoff table, we can see that Option 3 has the highest of all of the nine possible outcomes at H\$95,000. Therefore, a risk-seeking decision maker would choose Option 3.

A limitation of a risk-seeking approach is that it ignores the probability associated with the option chosen. Option 3 would be chosen, but this has only a 30% chance of occurring. The probability indicates that there is a 50% chance that sales are moderate, in which case Option 2 gives the best result. Similarly, there is a 20% chance of low demand where Option 1 would be the best option.

#### **Risk neutral**

A risk neutral decision maker will ignore risk but will choose the option that gives the highest expected value. Expected value is the weighted average outcome based on the probabilities and represents the expected outcome assuming that the decision is made time and time again. A risk neutral decision maker will therefore also choose Option 3, as this has the highest expected value of H\$56,300.

A limitation of a risk neutral approach is that it is based on expected value. Expected value represents the long run average outcome if the same event was to be repeated over and over. The choice of order size is a one-off decision and hence the expected value is not representative.

### **Risk averse**

A risk averse decision maker will choose the option which, given the same level of expected return, has the lowest level of risk. This type of decision maker would choose the option with the lowest coefficient of variation because this measures risk per H\$1 of expected value. Therefore, Option 1 would be chosen, as this has the lowest coefficient of variation at 0.25, despite the fact that this has by far the lowest expected value.

A limitation of a risk averse approach is that it is based on the co-efficient of variation, which assumes a linear relationship between risk and return and that decision makers will be willing to risk more when the return is higher. This is seldom the case as a decision maker's attitude towards losing changes as the value risked changes.

## Operational Level Case Study – Examiner’s report

### November 2024 – February 2025 exam session

This document should be read in conjunction with the examiner’s suggested answers and marking guidance.

#### General comments

The OCS examinations for November 2024 and February 2025 were based on BackOffice, a company that designs, manufactures and markets backpacks that serve as an alternative to the traditional briefcase. BackOffice backpacks are built to a high specification and aimed at a growing market of hybrid workers. BackOffice is a high-value brand, and this is reflected in the relatively high-selling prices compared to other backpack brands. Currently, BackOffice sells its products through the BackOffice website and selected retail stores. The company is based in Hland, a country in Western Europe which has the H\$ as its currency.

BackOffice was founded in 2015 by Arlo James, a chief designer for a hiking backpack company. He realised that there was a gap in the business market for a backpack that incorporated style, good interior functionality and comfort while being worn. When Arlo founded BackOffice, he decided that his company would have an in-house manufacturing facility in Hland, and this has proved to be a significant part of the success of the BackOffice brand as the backpacks are marketed as ‘made in Hland’.

BackOffice has experienced sales growth every year since launch and since the founding of the company, Arlo James has recruited a highly competent team of senior managers. In the year to 30 June 2024, the company’s revenue was H\$16.1 million, gross profit was H\$7.9 million and profit before tax was H\$2.1 million. During this year, the company sold just over 100,000 backpacks.

Six variants were written based on BackOffice. The focus of each variant was as follows:

- Variant 1: Launch of a new range of cycle backpacks
- Variant 2: Launch of a new range of backpacks made from recycled plastic
- Variant 3: Launch of a new range of Modis backpacks
- Variant 4: Opening of BackOffice’s own retail stores and adding an accessories range
- Variant 5: Launch of a new range of cabin bags
- Variant 6: Expansion of sales channels in Byland, a large country in the Americas

Each variant was based on the OCS case study blueprint and covered all core activities in accordance with the weightings prescribed. A levels-based approach was used for marking candidate answers. Each variant consisted of four tasks and each of these tasks was broken down into between two and four sub-tasks. Each sub-task was then broken down into between one and five traits for marking. For each trait, there was a detailed marking guide which split the total mark available into three levels: level 1, level 2 and level 3. It was also possible to achieve a score of zero for a trait if there was no rewardable material.

For OCS, there are four key elements that determine whether an answer is judged at level 1, level 2 or level 3. These are summarised in the following table:

<b>Element</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>
<b>Technical understanding</b>	There are technical inaccuracies and/or gaps in the answer. Some technical understanding of the topic area being tested is demonstrated.	There are some technical inaccuracies and/or gaps in the answer. Reasonable technical understanding of the topic area being tested is demonstrated.	There are limited or no technical inaccuracies and/or gaps in the answer. Good technical understanding of the topic area being tested is demonstrated.
<b>Use of the material given</b>	There is no, or very limited, reference to, or use of, the information given in the case study to support the answer.	There is some reference to, or use of, the information given in the case study to support the answer.	There is reference to, or use of, the information given in the case study to support the answer.
<b>Application to the scenario and context</b>	There is no, or very limited, application to the scenario in terms of consideration of the company or sub-task context to support the answer.	There is some attempt at application to the scenario in terms of consideration of the company or sub-task context to support the answer.	There is a good attempt at application to the scenario in terms of consideration of the company or sub-task context to support the answer.
<b>Communication</b>	The answer lacks clarity and detail. Points made are identified or stated rather than explained and/or justified.	The answer lacks some clarity and/or detail. Points made lack some explanation and/or justification.	The answer is mostly clear and detailed. Points made are fully explained and/or justified.

As is mentioned in each and every examiner's report, demonstrating good technical understanding is not enough on its own to pass. Candidates need to demonstrate technical understanding in the context of the scenario and the particulars of the issue being addressed. Information given to candidates as part of the task is there for a reason and should be, as far as possible, incorporated into answers, along with relevant information from the pre-seen. Application to the scenario is key to achieving high level 2 and level 3 scores. Clearly where there are gaps in knowledge, application is not possible and therefore the importance of candidates ensuring that their knowledge base is complete needs to be reiterated. In addition, to score at high level 2 or level 3, answers need to be clear and an explanation or justification rather than a description, identification or simple statement.

### **Candidate Performance**

As is usually the case, candidate performance was varied:

- Consistent with previous sessions, there were a significant number of candidates that achieved less than 25% of the marks available, which is very disappointing. Most of these candidates attempted to answer all sub-tasks, but seemed wholly unprepared for the exam, with their answers demonstrating poor technical understanding, limited use of the information given or application to the scenario and often completely lacking in clarity and detail.
- At the other extreme, it was good to see that there were more high scoring answers for this session, with a number of candidates scoring more than 80% of the marks available. These candidates gave well-structured, clear and comprehensively explained and justified answers to the specific task given and demonstrated technical understanding in an applied way, by fully utilising the information given in the pre-seen and the unseen materials.
- As to be expected, the majority of candidates were in the mid-range overall. Some of these candidates were mid-range because they had specific gaps in technical knowledge, which meant that they scored poorly on some sub-tasks but did well in other sub-tasks. For most candidates in the mid range though, answers for sub-tasks were consistently at level 2, usually because of a lack of clarity and detail in answers and/or limited use of the unseen material and limited application to the scenario.

Specific topic areas where many candidates demonstrated good technical understanding included CGMA cost transformation model, IAS 16, IFRS 5 criteria for reclassification, EOQ, decision making with risk, beyond budgeting, PV charts, rolling budgets and basic variances (raw materials, direct labour and sales price). The areas where candidates demonstrated a lack of technical understanding included variable and fixed overhead variances, sales mix variances, taxation issues, flexible budgets and sensitivity analysis.

There continues to be a lack of depth of explanation or justification in some of the tasks, especially in relation to financial reporting tasks. Remember, an explanation requires more than a short sentence on a point or simple identification of a rule in a financial reporting standard. Application to the specifics of the scenario by referencing the information given is also lacking at times. There was also a lack of clarity in certain areas such as explaining the meaning of an adverse or favourable variance or how a KPI would be measured.

With respect to the core activities for this session, candidate performance was typically best for C (performance evaluation), E (decision making) and D (financial reporting). The less competent core activities appeared to be A (costing), B (budgeting) and F (working capital), but this often depended on the topic area that the task was based on. Many answers were clearly laid out, with heading and sub-headings and timing did not seem to be an issue for most candidates.

To sum up, as has been noted many times before, the difference between a fail/bare pass and a good pass is often a candidate's ability to apply their technical understanding to the scenario and to incorporate this application into their answers consistently. Candidates should also pay attention to their clarity of explanation and ensure that they have addressed all parts of the sub-task. The same general advice to candidates applies to this session as much as all the previous sessions: answer the sub-task set (not what you wish had been set based on your pre-prepared answer), answer all parts of the sub-task and demonstrate technical understanding within the context of the business and the sub-task, referring as much as possible to the information given to you.

## Variant 1

### Task 1

The first sub-task asked for an explanation of what the time series information in Schedule 1 told about demand for cycle panniers in Veeland. This tested core activity B. Most candidates just focused on the seasonality data, making sensible comments on the likely impact of weather on cyclists and therefore the demand for panniers. However, it was also expected that candidates would explain the implications of the trend line for demand, but this aspect was often ignored. Those that did comment on the trend line typically explained how this would have been established, for example, using 4-point moving averages, rather than explain what the trend line represented. As a result, most candidates scored at level 2 here.

The second sub-task asked for an explanation of three limitations of the information for the purpose of forecasting the likely demand for BackOffice's new Cycle Backpack. This tested core activity B. This was usually well answered, with most candidates commenting that the data was nearly 2 years old and was based in a different country. Those scoring at level 1 usually missed these key points and instead commented on issues such as the reliability of the market research used to obtain the data and how to get the line of best fit.

The third sub-task asked for an explanation of how the company could use maximax, maximin and minimax regret decision criteria to decide which promotional company should be used, stating which company would be selected under each criterion. This tested core activity E. Most candidates were able to score at level 2 here because they demonstrated understanding of what the three decision criteria meant and, in the main, could correctly identify the correct company. For level 3 scores, some depth to the explanation of each criterion was required and, unfortunately, many candidates failed to do this. As an example, for maximax, many candidates simply said that Company A should be chosen because, for a good market reaction, it would be H\$372,000. Whilst this was correct, a more detailed explanation of maximax was expected for full credit.

The fourth sub-task asked for an explanation of two non-financial considerations the company should consider when making this decision. This tested core activity E. Many candidates could only come up with one sensible non-financial consideration, limiting scores to low level 2. This was usually a comment on the chosen company's sustainability, ethics or working practices. This was appropriate, but many candidates often struggled to discuss a second suitable consideration, either not suggesting another one or proposing one that was more of a financial consideration.

### Task 2

The first sub-task asked for an explanation of how the expenditure on the sewing machines shown in Table 1 should be recorded in the statement of financial position and statement of profit or loss for the year ending 30 June 2025. This tested core activity D. This

was well answered by many candidates who demonstrated good technical understanding of IAS 16: Property, plant and equipment. However, common issues, that limited scores to level 2 rather than level 3, were a failure to fully justify why the installation costs should be capitalised (most just stated “because they are directly attributable”), and why the training costs should be expensed (most just stated they cannot be capitalised under financial reporting standards). There were some poor answers, scoring at level 1, where candidates made a number of technical errors, such as incorrectly including the training costs as capital expenditure and depreciating from 1 March instead of 1 April.

The second sub-task asked for an explanation of how the expenditure on the sewing machines shown in Table 1 would impact the calculation of corporate income tax payable for the year ending 30 June 2025, assuming that the company took advantage of the 100% first-year tax depreciation allowance. This tested core activity D. In contrast to the previous sub-task, this was not well answered, with many candidates showing a lack of technical understanding. Whilst most candidates recognised that accounting depreciation should be added back in the tax payable calculation, they often could not explain the implications of the 100% first year allowance. There was also a lot of confusion between the 25% rate of the company’s corporate income tax and the normal 25% reducing balance tax depreciation allowance. Most candidates failed to score more than level 1 here.

The third sub-task asked for an explanation of the ratios in Table 2 and possible reasons for the differences in the ratios between Supplier 1 and Supplier 2, including any reasons BackOffice might prefer one supplier over the other. This tested core activity F. There were many disappointing answers here, with some candidates failing to understand the difference between working capital turnover and working capital days. The data referred to in the question showed inventory, receivables and payables turnover, and the data included the word “times” and not days. Despite this, a number of candidates explained the data in terms of days and, as a result, lead them to make incorrect comments. As an example, some candidates said that Supplier 1 had 45 days inventory compared with Supplier 2’s 4 days. This was totally incorrect and ignored the fact that candidates were told that Supplier 1 worked on a JIT basis and therefore would not carry as many days inventory as Supplier 2. In a similar way, a number of candidates said that Supplier 2 should be selected because its receivables turnover was higher than that for Supplier 1 and would therefore give BackOffice a longer credit period. This was also incorrect. Where candidates interpreted the ratios correctly, this often scored at level 3.

### **Task 3**

The first sub-task asked for an explanation of what a rolling budget is and the potential benefits and drawbacks of adopting rolling budgets throughout the business. This tested core activity B. This was reasonably well attempted. Candidates, in general, demonstrated good technical knowledge of rolling budgets and could usually explain some potential benefits. However, scores were often limited to mid-level 2 or lower because many of the points made were generic rather than linked to the case study scenario.

The second sub-task asked for an explanation of how to determine the cost per app download and the difficulties associated with determining this. This tested core activity A. Too many candidates wanted to explain the differences between costing digital and

physical products. These kinds of answers were alluding to tasks from previous case studies and were not the right approach to have taken here and scored no marks. Candidates were given a cost breakdown between fixed, variable and daily costs, and many candidates incorrectly went down the route of discussing which costs were relevant, usually saying that BackOffice management costs were not because they were unlikely to change, and that the development costs of H\$450,000 would be a sunk cost. Answers such as these would perhaps have been reasonable for a different kind of task but failed to address the task given. Therefore, answers for the first element of this sub-task were disappointing, possibly as a result of not reading the task carefully enough and/or wanting to produce an answer to previous tasks. In contrast, there was a reasonable explanation of some of the difficulties, usually of forecasting the number of downloads and the life of the app, and so candidates scored better here.

#### Task 4

The first sub-task asked for an explanation of what the KPIs shown in Table 1 indicated about the website performance for August, noting any effect the promotional campaign may have had. This tested core activity C. This was usually well attempted. Most candidates demonstrated an understanding of what the KPIs were showing and made a reasonable attempt to link their comments to the promotional campaign. A fairly common suggestion was to say that the higher customer acquisition cost KPI was due to lower customer orders, whereas a better answer would have been to suggest that the higher unit cost would have been caused by the unplanned promotional campaign.

The second sub-task asked for an explanation of what the sales variances in Table 2 meant and whether they might have been caused by the promotional campaign. This tested core activity C. Most candidates scored at least higher level 2 here. Some candidates commented that the price variance was influenced by the promotional campaign, but this was not correct because the promotional campaign was focused on website sales, and these had remained at standard selling price.

The third sub-task asked for an explanation of the meaning and possible causes of the direct labour variances in Table 3. This tested core activity C. Again, many candidates did well here, scoring at higher level 2 or above. Candidates that didn't score so well often showed a lack of clarity when explaining the labour rate variance (sometimes saying it was due to overtime working), the idle time variance (not making it clear enough that this referred to payments made when not be productive), and labour efficiency (linking actual hours to budgeted hours, or due to machines shutdown rather than machines running slower).

The fourth sub-task asked for an explanation of what the expected values shown in Table 4 meant and how they could be used to decide whether to pay the maintenance company to investigate the machine set up immediately. This tested core activity E. There could have been a timing or fatigue problem, as it was the final section of the case study, but there were many brief answers here. However, most candidates did make the correct decision to investigate immediately even if more discussion of the table provided was needed to score at higher level 2 or level 3.

## Variant 2

### Task 1

The first sub-task asked for an explanation of the three KPIs in Table 1, including any concerns of using them to rank the two suppliers. This tested core activity C. Although the context of using KPIs to compare suppliers was unusual, most candidates were able to provide a reasonable explanation of the meaning of the KPIs given and why these measures were important to BackOffice. Some candidates also provided sensible comments about the suitability of using the KPIs to rank the suppliers, including comments on quality and the absolute level of wastage in the third KPI. These candidates typically scored at level 3.

The second sub-task asked for an explanation of the effect Supplier 1's proposal would have on the company's working capital cycle. This tested core activity F. This was not well answered. Many candidates commented that inventory would increase and missed the point that the PET polyester held on site would not be the inventory of BackOffice until it was needed for production. However, most candidates did realise that there would be a reduction of payable days, although many then went on to explain that this would reduce the working capital cycle, rather than increase it. There were a lot of confused answers here.

The third sub-task asked for an explanation of three areas of the CGMA cost transformation model and how these applied to recent work done on new products. This tested core activity A. This was reasonably well answered, with many higher level 2 and some level 3 scores where candidates demonstrated they understood what each element of the model referred to and made a decent attempt to explain this in the context of the company's new products. There was good use of the pre-seen by these candidates. Where candidates didn't score so well, this was usually because of a focus on price or marketing rather than cost transformation or a lack of application to the context of new products.

### Task 2

The first sub-task asked for an explanation of how the right-of-use asset would be initially recorded and subsequently measured in the financial statements for the year ending 30 June 2025. This tested core activity D. Accounting for leases has been asked many times in previous OCS, and so it was disappointing how poorly answered this was on the whole. Many candidates appreciated that the right-of-use asset would include the present value of the lease payments but then failed to consider the impact of the payment in advance. A number of candidates also incorrectly treated the arrangement fee as an expense to be written off to profit or loss. Most candidates knew that the asset would be depreciated over 5 years rather than the useful life of 9 years but failed to justify why this was the case. In addition, many candidates failed to comment on the fact that depreciation would be for 4 months only, or if they did comment, failed to justify why this was the case. As a result, many answers lacked both technical accuracy and depth and scored at lower level 2 or below. For the future, candidates should be advised that in tasks related to financial reporting standards, they are expected to justify

the accounting treatment (for example, the life of 5 years is used because the asset will be returned to the lessor at the end of the lease term) and not just make simple statements.

The second sub-task asked for an explanation of how the lifetime cash-flow from taking up the lease, detailed in Table 1, would differ from the lifetime cash-flow of purchasing the cutting machine. It also asked for an explanation of which option would be most appropriate to the company circumstances. This tested core activity F. Answers here were typically either very brief or very confused. Some candidates failed to read the task properly because they explained at length how to account for a purchased asset, ignoring that the task was very specifically about the lifetime cash-flows. Those candidates that did comment on cash-flows, did usually mention the upfront payment for purchasing versus the spread of payments for the lease, but then failed to comment on the scale of the cash-flows. Most candidates did make a recommendation, but often did not expand on why this was the best option.

The third sub-task asked for an explanation of what Chart 1 indicated about the comparative results of the two Salvare promotional campaigns for the quarter following the launch. The comparison needed to consider fixed costs, breakeven points, margins of safety, revenues and gradients of the product lines. This tested core activity E. Most candidates were able to identify the fixed costs and breakeven revenue for each campaign but failed to add any depth to their explanation of these or to accurately explain the margin of safety. Many candidates failed to recognise that the H\$25 donation to charity would increase variable cost per unit and that this was the reason for the difference in the c/s margins. Very few candidates picked up that sales volumes were higher for Campaign 2 as a result of this donation. Those candidates that did pick up on this were typically at level 3.

### Task 3

The first sub-task asked for an explanation of the effect that each of the two promotional campaigns would have on the original budgeted contribution and profit, based on the information in Table 1. It also asked for an explanation of two limitations of the what-if analysis in this situation. This tested core activity B. Many candidates scored at level 1 for the first part of this sub-task because they did little more than restate the information from Table 1. Candidates were expected to recognise two key points here. Firstly, that contribution was affected by both the increase in volume (which had been given in the task) and the increase in variable cost per unit for promotional campaign 2. Secondly, that profit was affected by the absolute changes in revenue, contribution and fixed costs. Very few candidates did this. The second part was better answered, although most candidates gave only two generic points.

The second sub-task asked for an explanation of the risk neutral approach taken to establish the sales volume of the original budget together with the limitations of using this approach. This tested core activity E. Answers here were disappointing, as many candidates seemed to miss the fact that this was about expected value. All that was expected to achieve a level 3 score was a clear explanation of what the expected value of 5,023 represented and some limitations of using this approach to establish the sales volume budget. Many candidates commented on other methods of forecasting or commented on different decision-making approaches.

The third sub-task asked for an explanation of how to construct a flexible budget for the Salvare range. It also asked for an explanation of how the company would use flexible budgeting for planning and control purposes for the Salvare range. This tested core activity B. Many candidates showed that they understood that a flexible budget varied with activity level, but few expanded on this to explain how the budget would be constructed or made reference to how different types of cost would behave in a flexible budget. This lack of depth meant that most candidates scored low level 2 at best. Some candidates were clearly confused between flexible and rolling budgets, as a significant number gave extensive answers on the latter. Where a candidate did understand flexible budgets, they were able to come up with sensible comments about planning and control, although these were often quite generic, again limiting the scores to lower level 2.

#### **Task 4**

The first sub-task asked for an explanation of how each issue in Schedule 1 should be treated in the financial statements for the year ended 30 June 2025. This tested core activity D. Answers for issue 1 and issue 2 typically lacked depth, which limited scores to lower level 2. Many candidates simply stated adjusting or non-adjusting without any justification for why this was the case. Answers for issue 2 were better and most candidates gave a reasonably full answer to the treatment of the inventory.

The second sub-task asked for an explanation of what the variances in Schedule 2 meant and, based on Leo's commentary, possible reasons for their occurrence. This tested core activity C. This was the classic OCS variance task in terms of explaining the meaning of the variance and then give a sensible reason. It is unfortunate that so many candidates still don't seem to understand what constitutes the meaning of a variance. What is required is not an explanation of how the variance is calculated, but instead an explanation of what the adverse or favourable variance means. For example, in this instance, there was an adverse direct labour rate variance. An explanation of its meaning would be 'The adverse rate variance means that we paid more per hour than our standard rate for the amount of hours worked'. Note that this refers to the rate per hour for the hours worked and doesn't just say that we paid more. Candidates are typically better at giving correct reasons for a variance. For this sub-task, candidates demonstrated better understanding of direct labour variances than either of the overhead variances. Many candidates showed a lack of understanding that the variable overhead expenditure variance is based on a flexed budget, whilst the fixed overhead expenditure variance is based on the fixed budget.

## Variant 3

### Task 1

The first sub-task asked for an explanation of how the damaged machine identified in Schedule 1 would be recorded in the financial statements for the year ending 30 June 2025. This tested core activity D. Most candidates recognised that the machine was impaired and must be written down in the statement of financial position. Higher scoring answers fully explained the impairment valuation rule and how this applied to the information in Schedule 1. Some candidates identified value in use as the new machine value but did not justify why this was the case (that being it represented the recoverable amount, being higher than the fair value less cost to sell of H\$5,200). Thus, these explanations lacked clarity and depth. Other candidates confused value in use, fair value less costs to sell and replacement value showing that they did not understand IAS 36. In relation to depreciation, many candidates commented that the machine would be depreciated over 3 years but some failed to expand on this by specifying the date from which this would be effective or how the depreciation for the year would be calculated on this basis. Some candidates omitted this part of the sub-task completely.

The second sub-task asked for an explanation of how the principles of a beyond budgeting approach differ from an incremental budgeting approach and the benefits of using 'beyond budgeting' for the Research & Development Department. This tested core activity B. Most candidates were able to explain the main features of beyond budgeting and compare this to incremental budgeting quite well. Many candidates emphasised the use of rolling budgets and management participation, with fewer covering benchmarks and KPIs. In relation to the benefits, candidate answers were often generic rather than being applied specifically to the Research & Development Department. Some candidates produced quite long answers about innovation and looking forward, but these were often too vague and did not demonstrate a clear understanding of the benefits or features of beyond budgeting. However, there were some excellent high scoring level 3 answers here.

The third sub-task asked for suggestions of three KPIs suitable for appraising the performance of the Research & Development Department, explaining how each would be measured and why it would be appropriate. This tested core activity C. Most candidates were able to come up with KPIs but too often answers were too vague both in terms of the KPI itself and how it would be measured. As a result, many scores were mid-level 2. Good answers showed an understanding of the key success factors that would be important to indicate good performance of the department and crafted KPIs around these.

### Task 2

The first sub-task asked for an explanation, with clear justification, of the relevant cost for each of the costs in Schedule 1. It also asked for an explanation of why a relevant cost approach does not always result in a lower value for the costs detailed in Schedule 1. This tested core activity E. Candidates generally did well on this task. Relevant costing is often tested in OCS and candidates should be familiar with this type of task. Where candidates didn't score highly, this was usually because of a failure to justify why a cost was

relevant. The key to scoring well in this type of task is the explanation of why the cost is relevant or not to show understanding of the underlying principles of the technique. There were some other common errors. Many candidates omitted the normal hourly rate of labour, stating that the relevant cost was only the opportunity cost. In addition, some candidates said that variable overheads were not relevant. Most candidates that addressed the second part of this sub-task did explain why the relevant costs could be higher, referring to the opportunity costs and the replacement costs from the scenario. Some candidates appeared to forget to answer this part of the task though which limited the score.

The second sub-task asked for an explanation of the differences between the profit statements in Schedule 2, and the profits shown, in each of the 2 months. It also asked for an explanation of the benefits to the business of using a marginal costing approach when producing management accounts. This tested core activity A. Many candidates did seem to understand the main principles behind the costing approaches but were unable to articulate them clearly. Candidates generally could explain that absorption costing included fixed production overheads in unit costs and marginal costing did not. However, not that many actually referred to the figures in the statements to demonstrate how that resulted in higher inventory and cost of sales figures. Again, many could articulate that absorption costing results in a higher profit when inventory is rising but less referred to the figures in the statements to show how this applied to the scenario. Few candidates explained over absorption, and even where commented on, most explanations lacked clarity. Overall, however, most candidates made a decent attempt at this task and scored at level 2.

### Task 3

The first sub-task asked for an explanation of what each of the variances in Schedule 1 meant and the reasons why each may have arisen. This tested core activity C. Most candidates could explain the sales price variance and link to the discount. However, candidates struggled more with the operational and planning sales profit volume variances. In explaining the operational variance, many candidates did score marks for meaning because they did not refer to the sales volume being higher than the revised volume. Candidates did better with the planning variance and did link this to the decision made by management in response to the competition. The sales profit mix and quantity variances were reasonably well considered, and many candidates did score full level 3 marks here. A common error for the mix variance was not stating why the variance was adverse (selling less of the more profitable product), merely stating the mix was different to budget. Some candidates came up with reasons for the variances that were not in the scenario when they could have referred to the reasons given in the notes.

The second sub-task asked for an explanation of what sales tax is and the effect it had on company profit or loss. It also asked for an explanation of why it is appropriate to price goods net of sales tax to retailers and inclusive of sales tax on the website. This tested core activity D. Candidates either knew how to answer this or they didn't. Many answers were concise and clear showing a good understanding. However, other candidates confused sales tax with corporate income tax or came up with incorrect reasons as to why the price would be different for the two groups of customers.

The third sub-task asked for an explanation of feedback and feedforward control and how each could be used to improve performance. It also asked candidates to use the variance information in Schedule 1 to illustrate explanations. This tested core activity B. Many candidates went straight into the explanation of how each type of control could help the business without defining it. There were surprisingly few explanations of feedforward control. Some candidates confused the two types of control and overall understanding of feedback was more evident than feedforward. Most candidates tried to use the variance information but, again, this was better applied to feedback than feedforward control.

#### **Task 4**

The first sub-task asked for an explanation of the principles behind the production plan and how it has been used to determine the number the company should make of each of the three types of Modis Packs. This tested core activity E. Most candidates did well on this task, with many high level 2 and level 3 scores. Where candidates scored lower marks, they often omitted to explain that there was no production of Picnic Packs owing to the existing inventory or their explanation lacked clarity and detail. Some candidates failed to even recognise the technique being used, demonstrating a lack of preparedness for this OCS.

The second sub-task asked for an explanation if, from both a financial and non-financial perspective, it was worth paying for the agency sewing labour. This tested core activity E. Most candidates were able to come up with sensible non-financial reasons that were well applied to the scenario and scored well for this. However, very few candidates explained the principle of shadow price and those that did often gave confused answers when referring to the information given.

The third sub-task asked for an explanation of the assumptions underlying the EOQ model and what the two charts in Schedule 2 revealed about the management of ballistic nylon inventory since April. This tested core activity F. Candidates were provided with two charts, one representing planned use of nylon and one representing actual use. Most candidates were able to explain the assumptions of EOQ and a significant number could explain the features of Chart 1. However, in relation to Chart 2, candidates often did little more than to say there was a buffer inventory without going into more detail about differences in lead time and the impact of this on inventory levels.

## Variant 4

### Task 1

The first sub-task asked for an explanation of how a with-recourse factoring arrangement might improve both the ageing of receivables and liquidity. It also asked for an explanation of two factors to consider when deciding whether to use this arrangement. This tested core activity F. Most candidates were able to explain how factoring works and that it would reduce the ageing of receivables and improve liquidity because of the advance of funds. Fewer candidates also commented on the expertise of the factor and how this would improve the ageing and liquidity, although there were many higher level 2 scores for this part of the sub-task. With respect to the two factors to consider, this was well answered by most candidates, with many scoring at level 3. Candidates that didn't score well here either identified factors rather than explained them or demonstrated a lack of understanding by commenting that a with-recourse arrangement meant that the factor would be responsible for irrecoverable debts. Most candidates covered the point about reputation and the aggressive approach to collections that might damage relationships.

The second sub-task asked for an explanation of big data analytics and the sources and types of big data that could be used to create a forecast of sales at different potential retail store locations. This tested core activity B. This was not well answered, with many candidates scoring at lower level 2 or below. The majority of candidates simply described big data, rather than explained big data analytics. In terms of sources and types of big data, answers often gave types of data but lacked suggestions for the source. Most candidates failed to focus their answer to the potential locations and instead commented generally about where bags could be bought. There was very little link between the source/type and what the company was trying to achieve. Some candidates commented on time series and linear regression which scored no marks as it was not relevant.

The third sub-task asked for an explanation of the potential problems associated with using big data to establish these forecasts that the external consultant would need to overcome. This tested core activity B. Most candidates interpreted this sub-task well in terms of the potential problems of using big data to forecast and were able to comment on the 4Vs. However, often answers were generic and not linked to the scenario, which limited scores to mid-level 2.

### Task 2

The sub-task asked for an explanation of the multi-product profit-volume chart (Chart 1) and what it indicated about the initial budget for the new accessories range. This tested core activity E. It was pleasing to see so many level 3 answers here. Many candidates gave a good explanation of what the chart indicated in terms of the basis of each line, the fixed costs and breakeven points, making good reference to the information in the chart itself (for example, identifying total fixed costs and the breakeven points). Quite often though, candidates failed to comment on total revenue and profit. A common error when interpreting the chart for weaker candidate was to

comment that the staggered line connecting points ABCDE and F meant that the only products to make profits were some of E and F. This demonstrated a lack of technical understanding.

The second sub-task asked for an explanation of the factors that should be considered when interpreting this chart. This tested core activity E. Many candidates seemed to misinterpret this sub-task and commented generally on the new accessory range, rather than focusing on the chart. What was expected here was consideration of the chart itself, including the assumptions underpinning the chart (for example, the order of sale) and the limitations of the information used to construct the chart (for example, the fact that this was a new range and therefore an initial budget, with some of the variables still undecided). Those candidates that did this (and there were some) often scored at level 3.

The third sub-task asked for an explanation of the decision tree and how it should be used to choose the combination of options for the SmartTech contract, using an expected value approach. It also asked for an explanation of one limitation of using this decision tree and one limitation of using an expected value approach to make this decision. This tested core activity E. For the first part of this sub-task, many candidates concentrated on how to use the decision tree, rather than give any explanation of the tree itself, which limited the marks that could be given. In terms of how to use the tree, few candidates gave a full explanation of starting with decision points C and F and then moving back to decision point G. Some candidates stated that the G\$80,000 receipt would need to be deducted rather than added it to the relevant expected value. For the second part of this sub-task, most candidates came up with two sensible limitations but failed to apply these to the scenario. Overall, most candidates scored at level 1 or 2; there were very few level 3 answers.

### **Task 3**

The first sub-task asked for an explanation of how the different items of expenditure in Table 1 would affect the financial statements for the year ending 30 June 2025. This tested core activity D. This type of sub-task has been given many times before and so the quality of answers was disappointing. What was expected here was explanation of recognition (so reference to future economic benefits, reliable measure and in use for more than 12 months) as well as explanation of initial and subsequent measurement for the two assets created. It was also expected that there would be justification of why the training and promotion costs would be expensed to profit or loss. Many candidates failed to consider recognition altogether. Most candidates did comment on initial and subsequent measurement for the point of sale equipment but often failed to justify why import duties and installation costs would be included or chose to depreciate over 5 years rather than 3 years. Some candidates suggested that the asset should be revalued or impaired in year 3 and most did not mention that only 4 months of depreciation was required. Many candidates also failed to justify why training costs were expensed. In terms of the security system, many candidates failed to mention that the cameras would be depreciated separately from the main system. Overall, most candidates scored at mid-level 2 or lower.

The second sub-task asked for an explanation of how the accessories inventory would be measured in the financial statements, with reference to the measurement rule in the relevant financial reporting standard and the information in Table 2. This tested core activity

D. Most candidates recognised the measurement rule in IAS 2 and made a good attempt to identify what the cost of an alarm would be with reference to the information. However, many failed to explain why the bulk discount, delivery cost and re-packaging costs would be included and the storage costs excluded. The explanation of how net realisable value would be established was often confused.

The third sub-task asked for suggestions of three KPIs that would be appropriate to monitor the performance of retail store employees at either a store or individual level. For each KPI, it asked for an explanation of how it would be measured and justify why it would be appropriate. This tested core activity C. Candidate performance was mixed here. Some candidates seemed to ignore that this sub-task was looking for KPIs to monitor the performance of retail employees, and instead suggested measures linked to store operating costs and inventory turnover; measures more suited to store managers rather than store employees. Other candidates did give sensible measures linked to sales generation, although often failed to fully justify why the measure was suitable or to give a description of measurement.

#### **Task 4**

The first sub-task asked for an explanation of what the variances shown in Schedule 1 for Store 1 and Store 2 meant, giving possible reasons why the variances had occurred. This tested core activity C. For the most part, candidates were able to explain the meaning of the price variances and gave appropriate reasons drawn from the scenario and did well here. The explanation of the quantity variance was also well done. However, this was not the case for the sales mix variances. Candidates continue to fail to be able to explain the meaning of sales mix variances. Many candidates stated that more or less of a range was sold, rather than commenting specifically that proportionately more or less of a range was being sold compared to the standard mix. Many candidates did link the change in quantities sold within the mix to the celebrity endorsement and the student endorsement and so were able to pick up some marks.

The second sub-task asked for an explanation, based on the information in Schedule 2, of the direct and indirect costs per sales transaction of the retail service provided in the stores, including the difficulties the company would face when determining these direct and indirect costs per sales transaction. This tested core activity A. This was a slightly different task to the norm and it was encouraging to see some good answers here; although most candidates scored mid level 2. Most candidates could explain the difference between direct and indirect costs in a general sense and did make some attempt to identify the direct costs associated with a sales transaction with reference to the information in Schedule 1. Fewer candidates identified indirect costs perhaps because these were less obvious from Schedule 2. The explanation of difficulties was often vague and not linked to individual costs.

## Variant 5

### Task 1

The first sub-task asked for an explanation of what the time series information in Schedule 1 indicated about demand for cabin bags in Hland over the period of the time series and whether this information was useful for determining the forecast sales of cabin bags for the period February to June 2025. This tested core activity B. Many candidates answers only went part way in answering this sub-task. Whilst the seasonal variations were usually commented on, few candidates explained that the trend line indicated a rising demand over time. In terms of usefulness, lower scoring candidates made only a brief and often vague comment on why the data could be useful, without explaining possible limitations of the trend line. Many candidates missed that the data was only up to the end of 2023 and therefore was out of date. Many also missed that the airline change to encourage the use of cabin bags had already happened and was reflected in the time series.

The second sub-task asked for an explanation of why it was important for planning and control purposes to revise the budgets for the year ended 30 June 2025 to include the impact of the new range. This tested core activity B. Most candidates provided brief answers but generally made one valid point for each of planning and control and so were able to score at level 2. Some candidates explained flexible budgeting, and sometimes zero based budgeting, which was not relevant and therefore scored no marks.

The third sub-task asked for an explanation of the impact of taking both types of discounts from suppliers on the investment in working capital for the new range of cabin bags. It also asked for an explanation of the non-financial and other financial issues that needed to be considered when deciding whether to take advantage of these discounts. This tested core activity F. This was poorly answered by many candidates, with most scores at level 1 or low level 2. This sub-task was about the impact of bulk purchase and prompt payment discounts on the investment in working capital and on the choice of supplier. However, many candidates instead focused on issues relating to the selection of the new suppliers, raising concerns such as supplier quality, ethics and sustainability, rather than focusing on the discounts. Where the impact on working capital was considered, some candidates seemed confused as they suggested that taking prompt payment discounts would reduce the investment in working capital, since the suppliers would be paid more quickly, when the opposite is actually the case (working capital will actually increase).

### Task 2

The first sub-task asked for an explanation of how the lease for the laser cutting machine, as detailed in Table 1, would be initially recorded and then subsequently measured in the financial statements for the year ending 30 June 2025. This tested core activity D. The explanation of how to initially record the machine was usually well answered by many candidates, showing good technical

understanding. Candidates that didn't score well here often made an attempt to explain the right-of-use asset but struggled to clearly explain the initial recording of the lease liability. The subsequent measurement of the machine was less well answered. Many candidates could not explain how the lease liability to 30 June 2025 would be accounted for, and again, although it was generally recognised that the asset should be depreciated, a common mistake was to assume a 1 February start date based on when the asset was used, rather than when available for use. However, nearly all candidates correctly recognised that depreciation would be 4 years, based on the lease term, rather than the asset's useful life.

The second sub-task asked for an explanation of how an ABC approach would differ to the current costing approach for the Cutting Department. It also asked for an illustration of the explanation with examples of costs and cost drivers for each of the three processes in Schedule 1. This tested core activity A. This was not well answered by most candidates, with scores typically at level 1 or low level 2 overall for this sub-task. Most candidates did demonstrate some basic understanding of how traditional absorption costing compared with activity-based costing and did make some attempt to consider cost drivers based on the information given about the processes. However, many answers were brief and quite often the cost drivers were vague. Most candidates failed to consider the costs associated with the processes, despite this being clearly asked for in the sub-task. Some candidates seemed to be giving an answer to a different sub-task, that being how the costings for the two products would be changed if ABC was used. Whilst some credit was given for this as part of explaining the differences, this was limited, as it was really an answer to a sub-task that has been asked before.

### Task 3

The first sub-task asked for an explanation of how to account for the damaged sewing machine in the financial statements for the year ended 30 June 2025. This tested core activity D. Most candidates recognised that this was an impairment issue but some were then uncertain how to measure and then account for the impairment. The scenario was quite clear; the damaged machine was to be kept, saving H\$14,000 in future repair costs. Candidates who recognised this as value in use usually ended up with a level 3 score because they were able to correctly apply the valuation rule. However, some candidates commented that the damaged machine should be held as an asset for sale, often going to some length to explain the relevant criteria for this to be the case and typically arriving at a value of H\$11,500 for the asset, and sometimes H\$13,500 by adding the selling costs on, rather than deducting them. This ignored the higher value in use of H\$14,000 and the fact that this was not an asset held for sale. Very few candidates mentioned that there would be further depreciation from 1 April to 30 June.

The second sub-task asked for an explanation of the maximax, maximin and minmax regret decision criteria and how each of these could be applied to the information in Schedule 1 to decide which supplier to choose, stating the supplier in each case. This tested core activity E. This is a sub-task that has been asked many times before and it was pleasing to see many candidates scoring at level 3. Where candidates didn't score at level 3, this was often due to a lack of detail when explaining each criterion. For example, stating

for maximax that this is the 'best of the best' or that it is 'an opportunistic approach' is not an explanation. Some candidates were confused by the regret table; for example, adding all the regrets together and saying that Supplier B should be chosen for the minimax regret criteria because its total regret was H\$21,000. This demonstrates a lack of technical understanding.

The third sub-task asked for an explanation of Graph 1 and how to verify that where lines A and B intersected was the optimal solution. It also asked for an explanation of why it was financially beneficial to order additional fabric at the higher price and how to determine, based on Graph 1, how much additional specialist fabric should be ordered. This tested core activity E. Answers to the first part of this sub-task were disappointing, given that this was straightforward. Although most candidates demonstrated an understanding of linear programming, not many candidates explained the five lines on the graph or explained the feasible region. This made it difficult for these candidates to then explain why the AB intersect would be optimal. Very few candidates explained that point AB could be verified using simultaneous equations based on the two constraints, or by calculating the contribution for each possible solution. As a result, scores tended to be lower level 2 or level 1. Most candidates identified that the second part of this sub-task was about shadow price, but most struggled to explain this with technical accuracy and clarity. Those few candidates that did explain shadow pricing well were usually able to go on to explain how much fabric should then be ordered and so scored at level 3. Most candidates though scored at level 1 here.

## Task 4

The first sub-task asked for an explanation of what each of the variances shown in Table 1 meant and possible reasons for their occurrence, based on the information given. This tested core activity C. For raw material and direct labour variances, many candidates scored at level 3, as they gave clear and specific explanation of the meaning of adverse or favourable and provided sensible reasons based on the information given. Where candidates didn't score at level 3 for these variances, this was usually down to a lack of clarity, often referring to the word "budget" in their answers. For example, many candidates discussed both the material usage and labour efficiency variances in terms of actual usage against budget, not then making it clear as to whether this was using the original budget or linked to actual volumes. Some candidates also commented that an adverse efficiency variance meant that employees were less efficient. This is not explaining the meaning of the variance in terms of the time used. For fixed overhead variances, scores tended to be lower. There is still confusion between fixed overhead efficiency and capacity variances.

The second sub-task asked for an explanation of why each of the KPIs in Table 2 were suitable for measuring the performance of the Cutting Department and what these measures indicated about the performance of the department over the period. This tested core activity C. Many candidates scored at high level 2 or level 3 here by demonstrating an understanding of why the KPIs were suitable and what they were showing across the period. Many candidates were able to draw on the variance analysis table to comment on possible reasons for performance over the 3-month period, which was good to see.

## Variant 6

### Task 1

The first sub-task asked for an explanation of what each of the variances in Table 1 meant and possible reasons for their occurrence. This tested core activity C. Most candidates scored at mid-level 2 or lower for this sub-task, which is disappointing. When asked to explain the meaning of a variance, candidates need to explain what the adverse or favourable variance means to gain marks. For example, an adverse fixed overhead variance means that more was spent on fixed overheads in the period than budgeted. Whilst many candidates could explain the meaning of the fixed overhead expenditure variance, most could not explain the meaning of the variable overhead expenditure variance. Many answers stated that an adverse variance meant that the company had spent more on variable overheads than budgeted without relating the spend to the actual hours worked or the actual level of production. The reasons for the variances were more easily identified. However, candidates lost marks where they did not make clear which reason related to the variable overhead expenditure variance and which related to the fixed overhead expenditure variance. Many candidates were able to explain the overhead efficiency variances fairly well, although a number didn't seem to recognise that meaning and reasons were the same for both fixed and variable in this instance. As usual, most candidates could not explain the meaning of the fixed overhead capacity variance. Many candidates stated that the reason for the variance was because of the additional units produced as opposed to the additional labour hours which resulted from the overtime and the hiring of additional direct workers.

The second sub-task asked for an explanation of the potential benefits to the business of integrated internal systems and automated external links if the company implemented a digital costing system, using the information in Table 2 to support the explanation. This tested core activity A. Lower scoring candidates typically went through each measure in the table and stated that a digital costing system would improve it. This did not demonstrate any understanding of how or why a digital costing system could bring about benefits to the company. Higher scoring answers explained a range of benefits and explained how and why a digital costing system would help bring about the benefit, using the table to illustrate the point being made and showing good application to the company.

### Task 2

The first sub-task asked for an explanation of the factors to be considered when determining credit limits for retailers, with reference to the information in Table 1. This tested core activity F. Many candidates focused on commenting on the information in Table 1 on a general level, rather than explaining the factors relating to the information that would influence the size of the credit facility and the credit period. For example, a lot of candidates focused on the retailers' ability to generate sales, whether each retailer was a good fit, or what the footfall may be. These factors could have impacted on the potential size of the credit limit, but a lot of candidates did not make this connection. Most candidates did comment on the comparison of inventory and payables days, although many simply stated

that, for example, Glamhouse took longer to sell its products without explaining what the implication may be on its liquidity and therefore how this would influence our credit limits.

The second sub-task asked for an explanation of any other information that would be helpful when assessing the creditworthiness of Glamhouse and PW Finns. This tested core activity F. This was done fairly well, and most candidates did justify the sources of information they suggested. However, some candidates drifted away from the focus of the sub-task, by, for example, suggesting that the company visit premises to see working practices or by suggesting other information about the retailers that was not relevant to credit.

The third sub-task asked for suggestions of four KPIs that would be appropriate to monitor the performance of the new credit controller. It also asked for an explanation of how each KPI would be measured and why it would be appropriate. This tested core activity C. Candidates were given some clues in the information provided about the role of the credit controller to help them and it was pleasing to see that many candidates used this to frame their KPIs. Lower scoring candidates often suggested KPIs not under the control of the credit controller, for example, sales volumes. Each KPI must be SMART, and the measurement, which may or may not take the form of a calculation, clearly explained. Each KPI should be clearly justified. Candidates do well on justifying performance measures, but many lose marks as either the KPI is vague, or they do not clearly explain how to measure it.

### Task 3

The first sub-task asked for an explanation of how the employee cost budget for the Byland Distribution Centre would be established using an ABB approach. This tested core activity B. This was not well answered, with many candidates scoring at level 1 or lower level 2. A large number of candidates continue to confuse ABB with ABC. Such candidates discussed cost pools, drivers and the allocation of overhead costs using cost driver rates, rather than focusing on how the budget would be determined. There were some higher scoring candidates who used the information to identify the two main activities and explained that, to establish the budget, you multiplied the number of times the activity was carried out by the time taken for each activity (for example, the number of pallets moved multiplied by the time taken per pallet) to get the total time required. Better scoring candidates then went on to explain how the total time would determine the number of staff required and finally the cost, considering employer on costs, idle time and holiday and sickness allowances.

The second sub-task asked for an explanation of two potential difficulties and two potential benefits of using ABB to establish the employee cost budget for the Byland Distribution Centre. This tested core activity B. Candidates did reasonably well here but most lacked application. For example, hardly any candidates mentioned that the Distribution Centre was new and therefore to establish standard times for activities would be difficult. Also, many candidates stated that ABB was time consuming but did not go into more

detail. Candidates did say that ABB may give more accurate budgets, but many did not think about how they would improve on the current incremental budgets, for example, by removing budgetary slack. As a result, scores tended to be lower level 2 or level 1.

The third sub-task asked for an explanation of what sensitivity means in this context and what the information shown in Schedule 2 indicated about the most and least sensitive measures. It also asked for an explanation of why the level of sensitivity differed for different budget items. This tested core activity B. Answers to this sub-task were very poor, with many answers failing to score any marks. A common error was to mistake the sensitivity information for a what-if analysis. Many candidates did not explain that the analysis showed by what percentage the variable had to change for the company to make a loss. In addition, many candidates stated that the operating costs, as it had the largest percentage, was the most sensitive and that selling price with the smallest percentage was the least sensitive. This is incorrect; selling price, with 4% sensitivity, is the most sensitive budget item, as it only has to change by 4% before making a loss. These scripts scored no marks for this part of the task. Only a few good candidates were able to explain why the level of sensitivity differed but even then, there was often a lack of clarity.

## Task 4

The first sub-task asked for an explanation, with appropriate justification, of how the laser cutting machine detailed in Table 1 would be classified and measured in the financial statements for the year ending 30 June 2025. This tested core activity D. Most candidates could list most of the conditions necessary to classify the cutting machine as an asset held for sale and were able to correctly identify the date at which these would be satisfied. Some candidates answered this generically and merely listed the conditions without then justifying whether they were satisfied in this case. However, performance on this part of the task was generally good, with a good number of level 3 scores. Most candidates were able to state how the asset held for sale would be measured. However, lower scoring candidates tended to confuse fair value less costs to sell with recoverable amount. In terms of application, some candidates added on the selling costs rather than deducted them and also did not deduct the correct depreciation figure and therefore lost marks here.

The second sub-task asked for an explanation, with appropriate justification, of how the sewing machine detailed in Table 1 would be measured in the financial statements for the year ending 30 June 2025. This tested core activity D. Most candidates correctly stated that the repairs were an expense and should be treated as revenue expenditure, with only a small amount saying that the cost would be capitalised. However, some candidates lost marks by not justifying why the repairs were an expense. Many candidates were able to correctly explain how the change in useful life would be accounted for. However, some candidates forgot to include the residual value in their answers.

The third sub-task asked for an explanation of how to decide the order size using a risk seeking, risk neutral and risk averse approach, in each case giving the order size chosen. It also asked for one limitation of each decision approach. This tested core activity E. This

sub-task was done well, and most candidates scored at higher level 2 or level 3. Candidates that didn't score highly often referred to maximin and minimax regret, which are used in situations of uncertainty not risk. For risk averse, most candidates did say that the lowest coefficient of variation would be chosen but a small number referred to the lowest standard deviation.

## Tips for future candidates

There are several key points to take into account when preparing for future Operational level case study examinations. These points are the same as in previous reports and are:

- Key to achieving a score at level 2 and above is to ensure that:
  - You have the technical knowledge and understanding of all of topics included in each of the core activities. It is not sufficient to rely on the fact that you remember it from the OTQ exams or from your FLP studies because the chances are you won't. You need to revise technical material; if you don't have the knowledge, you can't score well.
  - You are able to apply your technical knowledge and understanding within the case study context. Simply reproducing rote-learned answers or pure knowledge of a topic area will score very few, if any, marks. Similarly, taking a non-targeted approach to an issue and commenting on everything that you know about it from a theoretical point of view will score few marks.
  - You are able to explain with clarity and comprehensively, rather than making unsupported statements. Writing comments such as, "this improves decision making", "this graph is essential" or "planning is enhanced" is not enough to gain any marks. Candidates must explain "how" and "why" this is the case. Explanations can quite often be improved by adding "because of ..." at the end of a sentence. Explanations should also utilise the information given to you within the case study itself, especially financial information. For example, reasons for variances are often given to you in the unseen information, the skill is to pick this out and use it.
- To help you achieve this, you need to:
  - Study the pre-seen material in depth. Ensure that you are very familiar with the business, especially the financial information, before the exam as this will help you with applying your knowledge and will save you time. Similarly, an awareness of the industry that the business is in will help you to think of the wider issues that might impact on decisions that you could be asked to comment on.

- Practise, practise, practise past OCS exam tasks. Practising past tasks and then checking against the published answers will help you to understand what the examiner is looking for.
- On the day:
  - It is important to take time to plan your answer so that you are able to apply your knowledge to the specifics of the case. I suggest that for certain tasks you plan your answers in the answer screen itself. For example, if you are asked for the potential benefits and problems of activity based costing, I suggest that you first note down headings for benefits and problems. Under each heading, list your benefits and problems; these will become your sub-headings. Then you can write a short paragraph under each sub-heading. This will allow you time to think about all of the points that you want to make and will help to give your answer a clear format. Ultimately, it should save you time.
  - Please take care over how your answer looks. Some answers are very difficult to read because of poor spelling and grammar. Whilst this examination is not a test of English, it is important that answers are presented well so that markers can see that you have demonstrated clear understanding of the issues.

## Operational Level Case Study November 2024 & February 2025

### Marking Guidance

#### Variant 1

##### About this marking scheme

This marking scheme has been prepared for the CGMA Professional Qualification Operational Case Study [November 2024 & February 2025].

The indicative answers will show the expected or most orthodox approach; however, the nature of the case study examination tasks means that a range of responses will be valid. The descriptors within this level-based marking scheme are holistic and can accommodate a range of acceptable responses.

General marking guidance is given below, and markers are subject to extensive training, standardisation activities and ongoing monitoring to ensure that judgements are made correctly and consistently.

Care must be taken not to make too many assumptions about future marking schemes on the basis of this document. While the guiding principles remain constant, details may change depending on the content of a particular case study examination form.

##### General marking guidance

- Marking schemes should be applied positively, with candidates rewarded for what they have demonstrated and not penalised for omissions.
- All marks on the scheme are designed to be awarded and full marks should be awarded when all level descriptor criteria are met.

- The marking scheme and indicative answers are provided as a guide to markers. They are not intended to be exhaustive and other valid approaches must be rewarded. Equally, students do not have to make all of the points mentioned in the indicative answers to receive the highest level of the marking scheme.
- An answer which does not address the requirements of the task must be awarded no marks. Markers should mark according to the marking scheme and not their perception of where the passing standard may lie. Where markers are in doubt as to the application of the marking scheme to a particular candidate script, they must contact their lead marker.

## How to use this levels-based marking scheme

### 1. Read the candidate's response in full

### 2. Select the level

- For each trait in the marking scheme, read each level descriptor and select one, using a best-fit approach.
- The response does not need to meet all of the criteria of the level descriptor – it should be placed at the level where it meets more of the criteria of this level than the criteria of the other levels.
- If the work fits more than one level, judge which one provides the best match.
- If the work is on the borderline between two levels, then it should be placed either at the top of the lower band or the bottom of the higher band, depending on where it fits best.

### 3. Select a mark within the level

- Once you have selected the level, you will need to choose the mark to apply.
- A small range of marks may be given at each level. You will need to use your professional judgement to decide which mark to allocate.
- If the answer is of high quality and convincingly meets the requirements of the level, then you should award the highest mark available. If not, then you should award a lower mark within the range available, making a judgement on the overall quality of the answer in relation to the level descriptor.

Summary of the core activities tested within each sub-task

Sub-task		Core Activity	Sub-task weighting (% section time)
<b>Section 1</b>			
(a)	B	Prepare budget information and assess its use for planning and control purposes.	24%
(b)	B		24%
(c)	E	Prepare information to support short-term decision making.	32%
(d)	E		20%
<b>Section 2</b>			
(a)	D	Apply relevant financial reporting standards and corporate governance, ethical and tax principles.	32%
(b)	D		28%
(c)	F	Prepare information to manage working capital.	40%
<b>Section 3</b>			
(a)	B	Prepare budget information and assess its use for planning and control purposes.	48%
(b)	A	Prepare costing information for different purposes to meet the needs of management.	52%
<b>Section 4</b>			
(a)	C	Analyse performance using financial and non-financial information.	36%
(b)	C	Analyse performance using financial and non-financial information.	16%
(c)	C	Analyse performance using financial and non-financial information.	24%
(d)	E	Prepare information to support short-term decision making	24%

<b>SECTION 1</b>			
<b>Task (a): Explain</b> what the time series information in Schedule 1 tells us about demand for cycle panniers in Veeland.			
<b>Trait</b>			
Time series information	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Explains trend and seasonal variations with some technical accuracy. The explanation lacks clarity and makes little reference to the information.	1 – 2
	Level 2	Explains trend and seasonal variations with reasonable technical accuracy. The explanation may lack some clarity but makes an attempt to reference the information.	3 – 4
	Level 3	Explains trend and seasonal variations with technical accuracy. The explanation is largely clear and makes good reference to the information.	5 – 6
<b>Task (b): Explain</b> three limitations of this information for the purpose of forecasting the likely demand for BackOffice’s new Cycle Backpack.			
<b>Trait</b>			
Limitations	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Explains at least one limitation. The explanation is likely to lack clarity and not refer to the scenario.	1 – 2
	Level 2	Explains at least two limitations. The explanation may lack some clarity and may not reference the scenario.	3 – 4
	Level 3	Explains at least three limitations. The explanation is mostly clear and references the scenario.	5 – 6

<b>SECTION 1 (continued)</b>			
<b>Task (c): Explain</b> how we could use maximax, maximin and minimax regret decision criteria to decide which promotional company we should use. Please also state which company would be selected under each criterion.			
<b>Trait</b>			
Decision criteria	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates a technical understanding of at least one of the decision criteria. The explanation lacks clarity depth. The correct promotional companies may not be stated.	1 – 3
	Level 2	Demonstrates a technical understanding of at least two of the decision criteria. The explanation may lack clarity and depth. The correct promotional companies may not always be stated.	4 – 6
	Level 3	Demonstrates a technical understanding of all three of the decision criteria. The explanation is mostly clear and detailed. The correct promotional companies are mostly stated.	7 – 8
<b>Task (d): Explain</b> two non-financial considerations we should consider when making this decision.			
<b>Trait</b>			
Non-financial	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Explains at least one valid non-financial consideration. The explanation may lack clarity and may not be applied to the specific context of the company.	1 – 2
	Level 2	Explains at least one valid non-financial consideration. The explanation is reasonably clear with some attempt at application to the specific context of the company.	3 – 4
	Level 3	Explains two valid non-financial considerations.. The explanation is mostly clear and is applied to the specific context of the company.	5

**SECTION 2**

**Task (a): Explain** how the expenditure on the sewing machines shown in Table 1 should be recorded in our statement of financial position and statement of profit or loss for the year ending 30 June 2025.

<b>Trait</b>			
IAS 16	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates a limited technical understanding of accounting for capital expenditure. The explanation lacks clarity, depth and reference to the information given.	1 – 3
	Level 2	Demonstrates a reasonable technical understanding of accounting for capital expenditure. The explanation may lack some clarity, depth and/or reference to the information given.	4 – 6
	Level 3	Demonstrates a good technical understanding of accounting for capital expenditure. The explanation is mostly clear, comprehensive and references the information given.	7 – 8

**SECTION 2 (continued)**

**Task (b): Explain** how the expenditure on the sewing machines shown in Table 1 will impact the calculation of corporate income tax payable for the year ending 30 June 2025, assuming that we take advantage of the 100% first-year tax depreciation allowance.

<b>Trait</b>			
<b>Tax</b>	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates a limited technical understanding of the impact of the expenditure on tax payable. The explanation lacks clarity, depth and reference to the information given.	1 – 2
	Level 2	Demonstrates a reasonable technical understanding of the impact of the expenditure on tax payable. The explanation may lack some clarity, depth and reference to the information given.	3 – 5
	Level 3	Demonstrates a good technical understanding of the impact of the expenditure on tax payable. The explanation is mostly clear, comprehensive and references the information given.	6 – 7

<b>SECTION 2 (continued)</b>			
<b>Task (c): Explain</b> the ratios in Table 2 and possible reasons for the differences in the ratios between Supplier 1 and Supplier 2, including any reasons BackOffice may prefer one supplier over the other.			
<b>Trait</b>			
Ratios	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some technical understanding of the meaning of the ratios. There is only a limited attempt to explain possible reasons for the differences in ratios between the two companies or which supplier might be preferable. The explanation lacks clarity and reference to the information given.	1 – 3
	Level 2	Demonstrates a reasonable technical understanding of the meaning of the ratios. There is some attempt to explain possible reasons for the differences in ratios between the two companies and which supplier would be preferable. The explanation lacks some clarity and/or reference to the information given.	4 – 7
	Level 3	Demonstrates a good technical understanding of the meaning of the ratios. There is a reasonable attempt to explain possible reasons for the differences in ratios between the two companies and which supplier would be preferable. The explanation is mostly clear and referenced to the information given.	8 – 10

<b>SECTION 3</b>			
<b>Task (a): Explain</b> what a rolling budget is and the potential benefits and drawbacks of adopting rolling budgets throughout the business.			
<b>Trait</b>			
Rolling budget and benefits	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates a limited technical understanding of rolling budgets and provides little in terms of benefits. The explanation lacks clarity and there is no or very limited application to the company.	1 – 2
	Level 2	Demonstrates a reasonable technical understanding of rolling budgets and provides some benefits. The explanation may lack some clarity, but there is some application to the company.	3 – 5
	Level 3	Demonstrates a good technical understanding of rolling budgets and provides some benefits. The explanation is mostly clear and there is good application to the company.	6 – 7
Drawbacks	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Provides limited drawbacks. The explanation lacks clarity and there is no or very limited application to the company.	1 – 2
	Level 2	Provides some drawbacks. The explanation may lack some clarity, but there is some application to the company.	3 – 4
	Level 3	Provides some drawbacks. The explanation is mostly clear and there is good application to the company.	5

<b>SECTION 3 (continued)</b>			
<b>Task (b): Explain</b> how to determine the cost per app download and the difficulties associated with determining this.			
<b>Trait</b>			
Cost per download	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	<b>Level 1</b>	Demonstrates some understanding of how to determine the cost per download. The explanation lacks clarity, depth and reference to the information given.	1 – 2
	<b>Level 2</b>	Demonstrates a reasonable understanding of how to determine the cost per download. The explanation may lack some clarity, depth and/or reference to the information given.	3 – 5
	<b>Level 3</b>	Demonstrates a good understanding of how to determine the cost per download. The explanation is mostly clear, comprehensive and makes good reference to the information given.	6 – 7
Difficulties	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	<b>Level 1</b>	Explains at least one relevant difficulty. The explanation lacks clarity and application to the scenario.	1 – 2
	<b>Level 2</b>	Explains at least two relevant difficulties. The explanation lacks some clarity and/or application to the scenario.	3 – 4
	<b>Level 3</b>	Explains three relevant difficulties. The explanation is mostly clear and applied to the scenario.	5 – 6

SECTION 4			
<b>Task (a): Explain</b> what the KPIs shown in Table 1 indicate about the website performance for August, noting any effect the unplanned promotional campaign may have had.			
<b>Trait</b>			
KPIs	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of the KPIs and what these indicate about website sales during the period. The explanation lacks clarity, depth and application to the scenario.	1 – 3
	Level 2	Demonstrates a reasonable understanding of the KPIs and what these indicate about website sales during the period. The explanation lacks some clarity, depth and application to the scenario.	4 – 6
	Level 3	Demonstrates a good understanding of the KPIs and what these indicate about website sales during the period. The explanation is mostly clear, comprehensive and applied to the scenario.	7 – 9
SECTION 4 (continued)			
<b>Task (b): Explain</b> what the sales variances in Table 2 mean and whether they might have been caused by the promotional campaign.			
<b>Trait</b>			
Sales variances	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Explains with technical accuracy what at least one of the variances means. The explanation and relation of the promotional campaign for the variance is likely to lack clarity and reference to the information given.	1
	Level 2	Explains with technical accuracy what at least one of the variances means. The explanation and relation of the promotional campaign for the variance(s) are mostly clear with reference to the information given.	2 – 3
	Level 3	Explains with technical accuracy the meaning of both variances. The explanation is mostly clear with reference to the information	4

		given. The explanation and relation of the promotional campaign for the variances are mostly clear and accurate.	
<b>Task (c): Explain</b> the meaning and possible causes of the direct labour variances in Table 3.			
<b>Trait</b>			
Direct labour variances	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	<b>Level 1</b>	Explains with technical accuracy what at least one of the variances means. The explanation and reason for the variance is likely to lack clarity and reference to the information given.	1 – 2
	<b>Level 2</b>	Explains with technical accuracy what at least two of the variances mean. The explanation and reasons are mostly clear with reference to the information given.	3 – 4
	<b>Level 3</b>	Explains with technical accuracy the meaning of all three variances. The explanation is mostly clear with reference to the information given. The reasons given for the variances are mostly clear and accurate.	5 – 6

<b>SECTION 4 (continued)</b>			
<b>Task (d): Explain</b> what the expected values shown in Table 4 mean and how they can be used to decide whether to pay the maintenance company to investigate the machine set up immediately.			
<b>Trait</b>			
Expected values	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	<b>Level 1</b>	Explains some of the information shown in the expected value table, but the explanation lacks clarity and makes little if any reference to the figures shown. May not explain how to reach a decision.	1 – 2
	<b>Level 2</b>	Explains some of the meaning of information shown in the expected value table. The explanation may lack a little clarity but refers to the material. Will explain how to reach a decision, but the explanation may lack accuracy and clarity.	3 – 4
	<b>Level 3</b>	Explains the meaning of most of the information shown in the expected value table clearly, making good reference to the figures shown. Will explain how to reach a decision clearly and accurately.	5 – 6

## Operational Level Case Study November 2024 & February 2025

### Marking Guidance

#### Variant 2

##### About this marking scheme

This marking scheme has been prepared for the CGMA Professional Qualification Operational Case Study [November 2024 & February 2025].

The indicative answers will show the expected or most orthodox approach; however, the nature of the case study examination tasks means that a range of responses will be valid. The descriptors within this level-based marking scheme are holistic and can accommodate a range of acceptable responses.

General marking guidance is given below, and markers are subject to extensive training, standardisation activities and ongoing monitoring to ensure that judgements are made correctly and consistently.

Care must be taken not to make too many assumptions about future marking schemes on the basis of this document. While the guiding principles remain constant, details may change depending on the content of a particular case study examination form.

##### General marking guidance

- Marking schemes should be applied positively, with candidates rewarded for what they have demonstrated and not penalised for omissions.
- All marks on the scheme are designed to be awarded and full marks should be awarded when all level descriptor criteria are met.

- The marking scheme and indicative answers are provided as a guide to markers. They are not intended to be exhaustive and other valid approaches must be rewarded. Equally, students do not have to make all of the points mentioned in the indicative answers to receive the highest level of the marking scheme.
- An answer which does not address the requirements of the task must be awarded no marks. Markers should mark according to the marking scheme and not their perception of where the passing standard may lie. Where markers are in doubt as to the application of the marking scheme to a particular candidate script, they must contact their lead marker.

## How to use this levels-based marking scheme

### 1. Read the candidate's response in full

### 2. Select the level

- For each trait in the marking scheme, read each level descriptor and select one, using a best-fit approach.
- The response does not need to meet all of the criteria of the level descriptor – it should be placed at the level where it meets more of the criteria of this level than the criteria of the other levels.
- If the work fits more than one level, judge which one provides the best match.
- If the work is on the borderline between two levels, then it should be placed either at the top of the lower band or the bottom of the higher band, depending on where it fits best.

### 3. Select a mark within the level

- Once you have selected the level, you will need to choose the mark to apply.
- A small range of marks may be given at each level. You will need to use your professional judgement to decide which mark to allocate.
- If the answer is of high quality and convincingly meets the requirements of the level, then you should award the highest mark available. If not, then you should award a lower mark within the range available, making a judgement on the overall quality of the answer in relation to the level descriptor.

Summary of the core activities tested within each sub-task

Sub-task	Core Activity		Sub-task weighting (% section time)
<b>Section 1</b>			
<b>(a)</b>	<b>C</b>	Analyse performance using financial and non-financial information.	36%
<b>(b)</b>	<b>F</b>	Prepare information to manage working capital.	16%
<b>(c)</b>	<b>A</b>	Prepare costing information for different purposes to meet the needs of management.	48%
<b>Section 2</b>			
<b>(a)</b>	<b>D</b>	Apply relevant financial reporting standards and corporate governance, ethical and tax principles.	24%
<b>(b)</b>	<b>F</b>	Prepare information to manage working capital.	28%
<b>(c)</b>	<b>E</b>	Prepare information to support short-term decision making.	48%
<b>Section 3</b>			
<b>(a)</b>	<b>B</b>	Prepare budget information and assess its use for planning and control purposes.	32%
<b>(b)</b>	<b>E</b>	Prepare information to support short-term decision making.	28%
<b>(c)</b>	<b>B</b>	Prepare budget information and assess its use for planning and control purposes.	40%
<b>Section 4</b>			
<b>(a)</b>	<b>D</b>	Apply relevant financial reporting standards and corporate governance, ethical and tax principles.	36%
<b>(b)</b>	<b>C</b>	Analyse performance using financial and non-financial information.	64%

<b>SECTION 1</b>			
<b>Task (a): Explain</b> the three KPIs in Table 1, including any concerns you may have using them to rank the two suppliers.			
<b>Trait</b>			
KPIs	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of the KPIs. The explanation lacks clarity, depth and application to the scenario. There is likely to be no reference to any concerns about ranking suppliers.	1 – 3
	Level 2	Demonstrates a reasonable understanding of the KPIs. The explanation lacks some clarity, depth and/or application to the scenario. There may be limited reference to concerns about ranking suppliers.	4 – 6
	Level 3	Demonstrates a good understanding of the KPIs. The explanation is mostly clear, comprehensive and applied to the scenario. There is some reference to concerns about ranking suppliers.	7 – 9
<b>Task (b): Explain</b> the effect Supplier 1’s proposal would have on our working capital cycle.			
<b>Trait</b>			
Proposal	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Explains one element of the working capital cycle that is affected by the proposal. The explanation lacks clarity, depth and application to the scenario.	1
	Level 2	Explains at least one element of the working capital cycle that is affected by the proposal. The explanation may lack some clarity and/or application to the scenario.	2 – 3
	Level 3	Explains both elements of the working capital cycle that are affected by the proposal. The explanation is mostly clear and applied to the scenario.	4

<b>SECTION 1 (continued)</b>			
<b>Task (c): Explain</b> the three areas of the CGMA cost transformation model identified above and how these apply to recent work done on our new products.			
<b>Trait</b>			
New products	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of this part of the model. The explanation lacks clarity, depth, with no application to the scenario.	1
	Level 2	Demonstrates a reasonable understanding of this part of the model. The explanation may lack some clarity and/or depth. Application to the scenario may be limited.	2 – 3
	Level 3	Demonstrates a good understanding of this part of the model. The explanation is mostly clear, detailed and applied to the scenario.	4
Managing risks	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of this part of the model. The explanation lacks clarity, depth, with no application to the scenario.	1
	Level 2	Demonstrates a reasonable understanding of this part of the model. The explanation may lack some clarity and/or depth. Application to the scenario may be limited.	2 – 3
	Level 3	Demonstrates a good understanding of this part of the model. The explanation is mostly clear, detailed and applied to the scenario.	4
Sustainability	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of this part of the model. The explanation lacks clarity, depth, with no application to the scenario.	1
	Level 2	Demonstrates a reasonable understanding of this part of the model. The explanation may lack some clarity and/or depth. Application to the scenario may be limited.	2 – 3
	Level 3	Demonstrates a good understanding of this part of the model. The explanation is mostly clear, detailed and applied to the scenario.	4

**SECTION 2**

**Task (a): Explain** how the right-of-use asset would be initially recorded and subsequently measured in our financial statements for the year ending 30 June 2025.

<b>Trait</b>			
Right-of-use	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some technical understanding of how the right-of-use asset will be initially recorded and subsequently measured. The explanation lacks clarity, depth and reference to the information provided.	1 – 2
	Level 2	Demonstrates a reasonable technical understanding of how the right-of-use asset will be initially recorded and subsequently measured. The explanation lacks some clarity, depth and/or reference to the information provided.	3 – 4
	Level 3	Demonstrates a good technical understanding of how the right-of-use asset will be initially recorded and subsequently measured. The explanation is mostly clear, comprehensive and references the information provided.	5 – 6

<b>SECTION 2 (continued)</b>			
<b>Task (b): Explain</b> how the lifetime cash-flow from taking up the lease, detailed in Table 1, would differ from the lifetime cash-flow of purchasing the cutting machine. Please also explain which option would be most appropriate to the company circumstances.			
<b>Trait</b>			
Cash-flow	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Explains one difference. The explanation lacks clarity and reference to the information given.	1
	Level 2	Explains at least one difference. The explanation lacks some clarity and/or reference to the information given.	2 – 3
	Level 3	Explains two differences. The explanation is clear and references the information given.	4
Best option	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Provides limited consideration of which option would be most appropriate.	1
	Level 2	Provides reasonable consideration of which option would be most appropriate.	2
	Level 3	Provides good consideration of which option would be most appropriate.	3
<b>SECTION 2</b>			
<b>Task (c): Explain</b> what Chart 1 indicates about the comparative results of the two Salvare promotional campaigns for the quarter following the launch. Your comparison should consider fixed costs, breakeven points, margins of safety, revenues and gradients of the product lines.			
<b>Trait</b>			
Fixed cost, breakeven and margin of safety	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of the multi-product profit-volume chart in terms of fixed cost, breakeven and margin of safety. The explanation lacks technical accuracy, clarity and makes little reference to the information given.	1 – 2

	Level 2	Demonstrates a reasonable understanding of the multi-product profit-volume chart in terms of fixed cost, breakeven and margin of safety. The explanation may lack some technical accuracy, clarity and/or reference to the information given.	3 – 4
	Level 3	Demonstrates a good understanding of the multi-product profit-volume chart in terms of fixed cost, breakeven and margin of safety. The explanation is mostly technically accurate, clear and makes good reference to the information given.	5 – 6
Revenues and gradient	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of the multi-product profit-volume chart in terms of revenues and gradient. The explanation lacks technical accuracy, clarity and makes little reference to the information given.	1 – 2
	Level 2	Demonstrates a reasonable understanding of the multi-product profit-volume chart in terms of the revenues and gradient. The explanation may lack some technical accuracy, clarity and/or reference to the information given.	3 – 4
	Level 3	Demonstrates a good understanding of the multi-product profit-volume chart in terms of revenues and gradient. The explanation is mostly technically accurate, clear and makes good reference to the information given.	5 – 6

<b>SECTION 3</b>			
<b>Task (a): Explain</b> the effect that each of the two promotional campaigns would have on the original budgeted contribution and profit, based on the information in Table 1. Please also explain two limitations of the what-if analysis in this situation.			
<b>Trait</b>			
What-if analysis	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates a limited understanding of the what-if analysis, with little attempt to explain the figures in Table 1.	1
	Level 2	Demonstrates a reasonable understanding of the what-if analysis and explains the figures in Table 1 with some accuracy.	2 – 3
	Level 3	Demonstrates comprehensive understanding of the what-if analysis and explains the figures in Table 1 accurately.	4
Limitations	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Explains one limitation of the analysis, although this is a generic point, rather than linked to the scenario.	1
	Level 2	Explains at least one limitation of the analysis. The explanation may not be linked to the scenario.	2 – 3
	Level 3	Explains two limitations of the analysis that are linked to the scenario.	4
<b>SECTION 3</b>			
<b>Task (b): Explain</b> the risk neutral approach taken to establish the sales volume of the original budget together with the limitations of using this approach.			
<b>Trait</b>			
Risk neutral	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of expected value and the limitations of its use to determine budgeted sales volumes. The explanation lacks clarity, depth and reference to the information given.	1 – 2
	Level 2	Demonstrates a reasonable understanding of expected value and the limitations of its use to determine budgeted sales volumes. The	3 – 5

		explanation lacks some clarity, depth and/or reference to the information given.	
	Level 3	Demonstrates a good understanding of expected value and the limitations of its use to determine budgeted sales volumes. The explanation is mostly clear, comprehensive and referenced to the information given.	6 – 7
<b>SECTION 3</b>			
<b>Task (c): Explain</b> how to construct a flexible budget for the Salvare range. Please also explain how we would use flexible budgeting for planning and control purposes for the Salvare range.			
<b>Trait</b>			
Flexible budget	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of how to construct a flexible budget. The explanation lacks technical accuracy, clarity and makes little reference to the scenario and/or information in Table 1.	1 – 2
	Level 2	Demonstrates a reasonable understanding of how to construct a flexible budget. The explanation has some technical accuracy but will be incomplete. There may only be passing reference to the scenario and/or information in Table 1.	3 – 4
	Level 3	Demonstrates a good understanding of how to construct a flexible budget. The explanation has technical accuracy and there is good reference made to the scenario and/or information in Table 1.	5
Planning and control	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of how a flexible budget is used for planning and/or control. The explanation lacks technical accuracy, clarity and makes little reference to the scenario.	1 – 2
	Level 2	Demonstrates a reasonable understanding of how a flexible budget is used for planning and/or control. The explanation is mostly clear, has some technical accuracy and there is reference to the scenario.	3 – 4

	Level 3	Demonstrates a good understanding of how a flexible budget is used for planning and control. The explanation is technically accurate and makes clear reference to the scenario.	5
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<b>SECTION 4</b>			
<b>Task (a): Explain</b> how each issue in Schedule 1 should be treated in our financial statements for the year ended 30 June 2025.			
<b>Trait</b>			
Issue a and 2	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates a limited understanding of adjusting/non-adjusting events. The explanation of how the two events will be treated in the financial statements lacks technical accuracy and clarity.	1 – 2
	Level 2	Demonstrates a general understanding of adjusting/non-adjusting events. The explanation of how the two events will be treated in the financial statements may lack some technical accuracy and clarity.	3 – 4
	Level 3	Demonstrates a good understanding of adjusting/non-adjusting events. The explanation of how the two events will be treated in the financial statements is mostly technically accurate and clear.	5
Issue 3	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of how to account for the faulty inventory. The explanation lacks technical accuracy, clarity, depth and application to the specific scenario.	1
	Level 2	Demonstrates a reasonable understanding of how to account for the faulty inventory. The explanation lacks some technical accuracy, clarity, depth and application to the specific scenario.	2 – 3
	Level 3	Demonstrates a good understanding of how to account for the faulty inventory. The explanation is mostly clear, comprehensive and technically accurate. There is application to the specific scenario.	4

<b>SECTION 4 (continued)</b>			
<b>Task (b): Explain</b> what the variances in Schedule 2 mean and, based on Leo's commentary, possible reasons for their occurrence.			
<b>Trait</b>			
Variable cost variances	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	<b>Level 1</b>	Explains at least one of the variances with technical accuracy. The explanation of meaning may lack clarity and the reasons for the variances may be missing or not related to the scenario.	1 – 3
	<b>Level 2</b>	Explains at least two of the variances with technical accuracy. The explanation of meaning may lack some clarity. Reasons for the variances will be given but may not always relate to the scenario.	4 – 7
	<b>Level 3</b>	Explains all of the variances with technical accuracy. The explanation of meaning is mostly clear and the reasons given relate to the scenario.	8 – 10
Fixed overhead variances	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	<b>Level 1</b>	Explains at least one of the variances with technical accuracy. The explanation of meaning may lack clarity and the reasons for the variances may be missing or not related to the scenario.	1 – 2
	<b>Level 2</b>	Explains at least two of the variances with technical accuracy. The explanation of meaning may lack some clarity. Reasons for the variances will be given but may not always relate to the scenario.	3 – 4
	<b>Level 3</b>	Explains the three variances with technical accuracy. The explanation of meaning is mostly clear, and the reasons given are related to the scenario.	5 – 6

## Operational Level Case Study November 2024 & February 2025

### Marking Guidance

#### Variant 3

##### About this marking scheme

This marking scheme has been prepared for the CGMA Professional Qualification Operational Case Study [November 2024 & February 2025].

The indicative answers will show the expected or most orthodox approach; however, the nature of the case study examination tasks means that a range of responses will be valid. The descriptors within this level-based marking scheme are holistic and can accommodate a range of acceptable responses.

General marking guidance is given below, and markers are subject to extensive training, standardisation activities and ongoing monitoring to ensure that judgements are made correctly and consistently.

Care must be taken not to make too many assumptions about future marking schemes on the basis of this document. While the guiding principles remain constant, details may change depending on the content of a particular case study examination form.

##### General marking guidance

- Marking schemes should be applied positively, with candidates rewarded for what they have demonstrated and not penalised for omissions.
- All marks on the scheme are designed to be awarded and full marks should be awarded when all level descriptor criteria are met.

- The marking scheme and indicative answers are provided as a guide to markers. They are not intended to be exhaustive and other valid approaches must be rewarded. Equally, students do not have to make all of the points mentioned in the indicative answers to receive the highest level of the marking scheme.
- An answer which does not address the requirements of the task must be awarded no marks. Markers should mark according to the marking scheme and not their perception of where the passing standard may lie. Where markers are in doubt as to the application of the marking scheme to a particular candidate script, they must contact their lead marker.

## How to use this levels-based marking scheme

### 1. Read the candidate's response in full

### 2. Select the level

- For each trait in the marking scheme, read each level descriptor and select one, using a best-fit approach.
- The response does not need to meet all of the criteria of the level descriptor – it should be placed at the level where it meets more of the criteria of this level than the criteria of the other levels.
- If the work fits more than one level, judge which one provides the best match.
- If the work is on the borderline between two levels, then it should be placed either at the top of the lower band or the bottom of the higher band, depending on where it fits best.

### 3. Select a mark within the level

- Once you have selected the level, you will need to choose the mark to apply.
- A small range of marks may be given at each level. You will need to use your professional judgement to decide which mark to allocate.
- If the answer is of high quality and convincingly meets the requirements of the level, then you should award the highest mark available. If not, then you should award a lower mark within the range available, making a judgement on the overall quality of the answer in relation to the level descriptor.

Summary of the core activities tested within each sub-task

Sub-task	Core Activity		Sub-task weighting (% section time)
<b>Section 1</b>			
(a)	D	Apply relevant financial reporting standards and corporate governance, ethical and tax principles.	28%
(b)	B	Prepare budget information and assess its use for planning and control purposes.	36%
(c)	C	Analyse performance using financial and non-financial information.	36%
<b>Section 2</b>			
(a)	E	Prepare information to support short-term decision making.	48%
(b)	A	Prepare costing information for different purposes to meet the needs of management.	52%
<b>Section 3</b>			
(a)	C	Analyse performance using financial and non-financial information.	40%
(b)	D	Apply relevant financial reporting standards and corporate governance, ethical and tax principles.	20%
(c)	B	Prepare budget information and assess its use for planning and control purposes.	40%
<b>Section 4</b>			
(a)	E	Prepare information to support short-term decision making.	28%
(b)	E	Prepare information to support short-term decision making.	24%
(c)	F	Prepare information to manage working capital.	48%

<b>SECTION 1</b>			
<b>Task (a): Explain</b> how the damaged machine identified in Schedule 1 will be recorded in our financial statements for the year ending 30 June 2025.			
<b>Trait</b>			
Damaged machine	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates a limited understanding of how the asset will be recorded. The explanation lacks clarity, depth and reference to the information given.	1 – 2
	Level 2	Demonstrates a reasonable understanding of how the asset will be recorded. The explanation may lack some clarity, depth and/or reference to the information given.	3 – 5
	Level 3	Demonstrates a good understanding of how the asset will be recorded. The explanation is mostly clear and references the information given	6 – 7
<b>Task (b): Explain</b> how the principles of a 'beyond budgeting' approach differ from an incremental budgeting approach and the benefits of using 'beyond budgeting' for the Research & Development Department.			
<b>Trait</b>			
Beyond budgeting	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Provides some explanation of the differences and benefits. The explanation lacks clarity, depth and reference to the Research & Development Department.	1 – 3
	Level 2	Provides a reasonable explanation of the differences and benefits. The explanation lacks some clarity, depth and/or reference to the Research & Development Department.	4 – 6
	Level 3	Provides a good explanation of the differences and benefits. The explanation is mostly clear, comprehensive and referenced to the Research & Development Department.	7 – 9

**SECTION 1 (continued)**

**Task (c): Suggest** three KPIs, suitable for appraising the performance of our Research & Development Department, explaining how each would be measured and why it would be appropriate.

<b>Trait</b>	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
KPIs		No rewardable material	0
	Level 1	Identifies at least one KPI which is appropriate for assessing the performance of the Research & Development Department. The justification/explanation may be missing or lack clarity.	1 – 3
	Level 2	Identifies at least two KPIs which are appropriate for assessing the performance of the Research & Development Department. The justification/explanation may lack some clarity or depth.	4 – 6
	Level 3	Identifies at least three KPIs that are appropriate for assessing the performance of the Research & Development Department. The suggestions are well justified and explained for the most part.	7 – 9

**SECTION 2**

**Task (a): Explain**, with clear justifications, the relevant cost for each of the costs in Schedule 1. Please explain why a relevant cost approach does not always result in a lower value for the costs detailed in Schedule 1.

<b>Trait</b>			
Relevant costs	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of relevant costs. Correctly identifies some of the relevant costs, but the justification is either missing or not clearly explained. Provides a very limited explanation of the reasons why a relevant costing approach does not always result in lower value in this situation.	1 – 4
	Level 2	Demonstrates a reasonable understanding of relevant costs. Correctly identifies some of the relevant costs with justifications that are reasonably clear. Provides a limited explanation of the reasons why a relevant costing approach does not always result in lower value in this situation.	5 – 8
	Level 3	Demonstrates a good understanding of relevant costs. Correctly identifies most of the relevant costs with clear justifications. Provides a reasonable explanation of the reasons why a relevant costing approach may not always result in a lower value in this situation.	9 – 12

**SECTION 2 (continued)**

**Task (b): Explain** the differences between the profit statements in Schedule 2, and the profits they show, in each of the 2 months. Please also explain the benefits to our business of using a marginal costing approach when producing management accounts.

<b>Trait</b>			
Differences	<b>Level</b>		<b>Level</b>
		No rewardable material	0
	<b>Level 1</b>	Demonstrates a limited understanding of the differences between a marginal and an absorption costing approach with limited or no reference to Schedule 2.	1 – 3
	<b>Level 2</b>	Demonstrates a reasonable understanding of the differences between a marginal and an absorption costing approach with some reference to Schedule 2.	4 – 5
	<b>Level 3</b>	Demonstrates a good understanding of the differences between a marginal and an absorption costing approach with good reference to Schedule 2.	6 – 7
Benefits	<b>Level</b>		<b>Level</b>
		No rewardable material	0
	<b>Level 1</b>	Explains at least one benefit. The explanation is likely to lack clarity and will probably not refer to the scenario.	1 – 2
	<b>Level 2</b>	Explains at least one benefit. The explanation is clear but may not reference the scenario.	3 – 4
	<b>Level 3</b>	Explains at least two benefits. The explanation is clear and references the scenario.	5 – 6

<b>SECTION 3</b>			
<b>Task (a): Explain</b> what each of the variances in Schedule 1 means and the reasons why each may have arisen.			
<b>Trait</b>			
Modis	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Explains what the sales variances mean with some technical accuracy but with a limited explanation of how these variances have arisen.	1 – 2
	Level 2	Explains what the sales variances mean with reasonable technical accuracy. Gives reasonable explanations of the reasons why most of these variances have arisen.	3 – 4
	Level 3	Explains what the sales variances mean with technical accuracy. Gives good explanations of the reasons why these variances have arisen.	5 – 6
Small EDC	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Explains what the sales variances mean with some technical accuracy but with a limited explanation of how these variances have arisen.	1
	Level 2	Explains what the sales variances mean with reasonable technical accuracy. Gives reasonable explanations of the reasons why most of these variances have arisen.	2 – 3
	Level 3	Explains what the sales variances mean with technical accuracy. Gives good explanations of the reasons why these variances have arisen.	4

<b>SECTION 3 (continued)</b>			
<b>Task (b): Explain</b> what sales tax is and the effect it has on our profit or loss. Please explain why it is appropriate to price goods net of sales tax to retailers and inclusive of sales tax on the website.			
<b>Trait</b>	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
Sales tax		No rewardable material	0
	Level 1	Explains sales tax with some technical accuracy. Provides a limited explanation of the appropriateness of inclusive or exclusive sales tax prices to the website and retailer customer. The explanation lacks clarity and depth.	1 – 2
	Level 2	Explains sales tax with reasonable technical accuracy. Some explanation of the appropriateness of inclusive or exclusive sales tax prices to the website and retailer customers. The explanation lacks some clarity and/or depth.	3 – 4
	Level 3	Explains sales tax with good technical accuracy. Provides a reasonable explanation of the appropriateness of inclusive or exclusive sales tax prices to the website and retailer customers. The explanation is are mostly clear and comprehensive.	5

<b>SECTION 3 (continued)</b>			
<b>Task (c): Explain</b> feedback and feedforward control and how each could be used to improve our performance. Please use the variance information in Schedule 1 to illustrate your explanations.			
<b>Trait</b>			
Feedback	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of feedback control and how it is used to improve performance. The explanation lacks technical accuracy, depth and application to the scenario.	1 – 2
	Level 2	Demonstrates a reasonable understanding of feedback control and how it is used to improve performance. The explanation may lack some technical accuracy, depth and/or application to the scenario.	3 – 4
	Level 3	Demonstrates a good understanding of feedback control and how it is used to improve performance. The explanation is technically accurate, comprehensive and applied to the scenario.	5
Feedforward	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of feedforward control and how it can be used to improve performance. The explanation lacks technical accuracy, depth and application to the scenario.	1 – 2
	Level 2	Demonstrates a reasonable understanding of feedforward control and how it can be used to improve performance. The explanation may lack some technical accuracy, depth and/or application to the scenario.	3 – 4
	Level 3	Demonstrates a good understanding of feedforward control and how it can be used to improve performance. The explanation is technically accurate, comprehensive and applied to the scenario.	5

<b>SECTION 4</b>			
<b>Task (a): Explain</b> the principles behind the production plan and how it has been used to determine the number we should make of each of the three types of Modis Packs.			
<b>Trait</b>			
Limiting Factor	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some technical understanding of the principles of limiting factor analysis. The explanation lacks clarity, depth and reference to the information given.	1 – 2
	Level 2	Demonstrates a reasonable technical understanding of the principles of limiting factor analysis. The explanation lacks some clarity, depth and/or reference to the information given.	3 – 5
	Level 3	Demonstrates a good technical understanding of the principles of limiting factor analysis. The explanation is mostly clear, comprehensive and referenced to the information given.	6 – 7
<b>Task (b): Explain</b> if, from both a financial and non-financial perspective, it is worth paying for the agency sewing labour.			
Agency staff	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some technical understanding of the principles of shadow price or makes an attempt to explain a non-financial reason for the hire of agency staff. The explanation lacks clarity, depth and application to the scenario.	1 – 2
	Level 2	Demonstrates a reasonable technical understanding of the principles of shadow price and/or offers a reasonable explanation of a non-financial reason for the hire of agency staff. The explanation lacks some clarity, depth and/or application to the scenario.	3 – 4
	Level 3	Demonstrates a good technical understanding of the principles of shadow price and offers a good explanation of at least one non-financial reason for the hire of agency staff. The explanation is mostly clear, comprehensive and is applied to the scenario.	5 – 6

<b>SECTION 4 (continued)</b>			
<b>Task (b): Explain</b> the assumptions underlying the EOQ model and what the two charts in Schedule 2 reveal about the management of our ballistic nylon inventory since April.			
<b>Trait</b>	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
EOQ and Chart 1		No rewardable material	0
	Level 1	Demonstrates some understanding of the EOQ model and its assumptions. The explanation of Chart 1 lacks clarity, depth and reference to the information given.	1 – 2
	Level 2	Demonstrates a reasonable understanding of the EOQ model and its assumptions. The explanation of Chart 1 may lack some clarity, depth and/or reference to the information given.	3 – 5
	Level 3	Demonstrates a good understanding of the EOQ model and its assumptions. The interpretation and explanation of Chart 1 is mostly clear, comprehensive and references to the information given.	6 – 7
Chart 2		No rewardable material	0
	Level 1	Demonstrates some understanding of Chart 2. The explanation lacks clarity, depth and reference to the information given.	1 – 2
	Level 2	Demonstrates a reasonable understanding of Chart 2. The explanation lacks some clarity, depth and/or reference to the information given.	3 – 4
	Level 3	Demonstrates a good understanding of Chart 2. The explanation is mostly clear, comprehensive and referenced to the information given.	5

## Operational Level Case Study November 2024 & February 2025

### Marking Guidance

#### Variant 4

#### About this marking scheme

This marking scheme has been prepared for the CGMA Professional Qualification Operational Case Study [November 2024 & February 2025].

The indicative answers will show the expected or most orthodox approach; however, the nature of the case study examination tasks means that a range of responses will be valid. The descriptors within this level-based marking scheme are holistic and can accommodate a range of acceptable responses.

General marking guidance is given below, and markers are subject to extensive training, standardisation activities and ongoing monitoring to ensure that judgements are made correctly and consistently.

Care must be taken not to make too many assumptions about future marking schemes on the basis of this document. While the guiding principles remain constant, details may change depending on the content of a particular case study examination form.

#### General marking guidance

- Marking schemes should be applied positively, with candidates rewarded for what they have demonstrated and not penalised for omissions.
- All marks on the scheme are designed to be awarded and full marks should be awarded when all level descriptor criteria are met.

- The marking scheme and indicative answers are provided as a guide to markers. They are not intended to be exhaustive and other valid approaches must be rewarded. Equally, students do not have to make all of the points mentioned in the indicative answers to receive the highest level of the marking scheme.
- An answer which does not address the requirements of the task must be awarded no marks. Markers should mark according to the marking scheme and not their perception of where the passing standard may lie. Where markers are in doubt as to the application of the marking scheme to a particular candidate script, they must contact their lead marker.

## How to use this levels-based marking scheme

### 1. Read the candidate's response in full

### 2. Select the level

- For each trait in the marking scheme, read each level descriptor and select one, using a best-fit approach.
- The response does not need to meet all of the criteria of the level descriptor – it should be placed at the level where it meets more of the criteria of this level than the criteria of the other levels.
- If the work fits more than one level, judge which one provides the best match.
- If the work is on the borderline between two levels, then it should be placed either at the top of the lower band or the bottom of the higher band, depending on where it fits best.

### 3. Select a mark within the level

- Once you have selected the level, you will need to choose the mark to apply.
- A small range of marks may be given at each level. You will need to use your professional judgement to decide which mark to allocate.
- If the answer is of high quality and convincingly meets the requirements of the level, then you should award the highest mark available. If not, then you should award a lower mark within the range available, making a judgement on the overall quality of the answer in relation to the level descriptor.

Summary of the core activities tested within each sub-task

Sub-task	Core activity		Sub-task weighting (% section time)
<b>Section 1</b>			
(a)	F	Prepare information to manage working capital.	32%
(b)	B	Prepare budget information and assess its use for planning and control purposes.	36%
(c)	B	Prepare budget information and assess its use for planning and control purposes.	32%
<b>Section 2</b>			
(a)	E	Prepare information to support short-term decision making.	28%
(b)	E	Prepare information to support short-term decision making.	24%
(c)	E	Prepare information to support short-term decision making.	48%
<b>Section 3</b>			
(a)	D	Apply relevant financial reporting standards and corporate governance, ethical and tax principles.	36%
(b)	D	Apply relevant financial reporting standards and corporate governance, ethical and tax principles.	28%
(c)	C	Analyse performance using financial and non-financial information.	36%
<b>Section 4</b>			
(a)	C	Analyse performance using financial and non-financial information.	48%
(b)	A	Prepare costing information for different purposes to meet the needs of management.	52%

<b>SECTION 1</b>			
<b>Task (a): Explain</b> how a with-recourse factoring arrangement might improve both our ageing of receivables and our liquidity. Please also explain two factors to consider when deciding whether to use this arrangement.			
<b>Trait</b>			
Improve	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates a limited understanding of how the factoring arrangement might improve aged analysis and liquidity. The explanation lacks clarity and reference to Schedule 1.	1
	Level 2	Demonstrates a reasonable understanding of how the factoring arrangement might improve aged analysis and liquidity. The explanation lacks some clarity and/or reference to Schedule 1.	2 – 3
	Level 3	Demonstrates a good understanding of how the factoring arrangement might improve aged analysis and liquidity. The explanation is mostly clear and referenced to Schedule 1.	4
Two factors	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Provides one factor to consider. The explanation lacks clarity and application to the scenario.	1
	Level 2	Provides at least one factor to consider. The explanation lacks some clarity and/or application to the scenario.	2 – 3
	Level 3	Provides two factors to consider. The explanation is mostly clear and applied to the scenario.	4

<b>SECTION 1 continued</b>			
<b>Task (b): Explain</b> big data analytics and the sources and types of big data that could be used to create a forecast of sales at different potential retail store locations.			
<b>Trait</b>			
Big data analytics	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of big data analytics and potential sources and types of big data suitable for this forecast. The explanation lacks clarity, detail and application to the scenario.	1 – 3
	Level 2	Demonstrates a reasonable understanding of big data analytics and potential sources and types of big data suitable for this forecast. The explanation lacks some clarity, detail and/or application to the scenario.	4 – 6
	Level 3	Demonstrates a good understanding of big data analytics and potential sources and types of big data suitable for this forecast. The explanation is mostly clear, detailed and applied to the scenario.	7 – 9
<b>Task (c): Explain</b> the potential problems associated with using big data to establish these forecasts that the external consultant will need to overcome.			
<b>Trait</b>			
Potential problems	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Explains at least one potential problem. The explanation lacks clarity, detail and application to the scenario.	1 – 3
	Level 2	Explains at least two potential problems. The explanation lacks some clarity, detail and/or application to the scenario.	4 – 6
	Level 3	Explains at least three potential problems. The explanation is mostly clear, detailed and applied to the scenario.	7 – 8

<b>SECTION 2</b>			
<b>Task (a): Explain</b> the multi-product profit-volume chart (Chart 1) and what it indicates about the initial budget for the new accessories range.			
<b>Trait</b>			
PV chart	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of the profit-volume chart and what this indicates about the initial budget. The explanation lacks detail, clarity and reference to the information given.	1 – 2
	Level 2	Demonstrates a reasonable understanding of the profit-volume chart and what this indicates about the initial budget. The explanation lacks some detail, clarity and/or reference to the information given.	3 – 5
	Level 3	Demonstrates a good understanding of the profit-volume chart and what this indicates about the initial budget. The explanation is detailed, mostly clear and makes good reference to the information given.	6 – 7
<b>Task (b): Explain</b> the factors that should be considered when interpreting this chart.			
<b>Trait</b>			
Factors to consider	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Provides at least one suitable factor to consider. The explanation lacks clarity and application to the scenario.	1 – 2
	Level 2	Provides at least two suitable factors to consider. The explanation lacks some clarity and/or application to the scenario.	3 – 4
	Level 3	Provides at least three suitable factors to consider. The explanation is mostly clear and applied to the scenario.	5 – 6

<b>SECTION 2 (continued)</b>			
<b>Task (c): Explain</b> the decision tree and how it should be used to choose the combination of options for the SmartTech contract, using an expected value approach. Please also include one limitation of using this decision tree and one limitation of using an expected value approach to make this decision.			
<b>Trait</b>			
Decision tree	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of the decision tree and how it should be used to make the decision. The explanation lacks technical accuracy, clarity and make little reference to the information in the decision tree.	1 – 3
	Level 2	Demonstrates a reasonable understanding of the decision tree and how it should be used to make the decision. The explanation lacks some technical accuracy and/or clarity but does make some reference to the information in the decision tree.	4 – 6
	Level 3	Demonstrates a good understanding of the decision tree and how it should be used to make the decision. The explanation is mostly technically accurate and clear, with reasonable reference to the information in the decision tree.	7 – 8
Limitations	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Provides one relevant limitation. The explanation lacks clarity and reference to the scenario.	1
	Level 2	Provides at least one relevant limitation. The explanation lacks some clarity and/or application to the scenario.	2 – 3
	Level 3	Provides two relevant limitations. The explanation is mostly clear and applied to the scenario.	4

**SECTION 3**

**Task (a): Explain** how the different items of expenditure in Table 1 will affect our financial statements for the year ending 30 June 2025.

<b>Trait</b>			
Expenditure	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of how the expenditure in Table 1 will affect the financial statements. The explanation lacks technical accuracy, detail and clarity. There is little reference to the information provided.	1 – 3
	Level 2	Demonstrates a reasonable understanding of how the expenditure in Table 1 will affect the financial statements. The explanation lacks some technical accuracy, detail and/or clarity. There is some reference to the information provided.	4 – 6
	Level 3	Demonstrates a good understanding of how the expenditure in Table 1 will affect the financial statements. The explanation is mostly technically accurate, detailed and clear. There is good reference to the information provided.	7 – 9

<b>SECTION 3 (continued)</b>			
<b>Task (b): Explain</b> how the accessories inventory will be measured in our financial statements, with reference to the measurement rule in the relevant financial reporting standard and the information in Table 2.			
<b>Trait</b>			
Inventory	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of how to measure the accessories inventory. The explanation lacks technical accuracy, detail and clarity. There is little reference to the information provided.	1 – 2
	Level 2	Demonstrates a reasonable understanding of how to measure the accessories inventory. The explanation lacks some technical accuracy, detail and/or clarity. There is some reference to the information provided.	3 – 5
	Level 3	Demonstrates a good understanding of how to measure the accessories inventory. The explanation is mostly technically accurate, detailed and clear. There is good reference to the information provided.	6 – 7
<b>Task (c): Suggest</b> three KPIs that would be appropriate to monitor the performance of retail store employees at either a store or individual level. For each KPI, please explain how it would be measured and justify why it would be appropriate.			
<b>Trait</b>			
KPIs	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Suggests at least one suitable KPI. The explanation of measurement and the justification lacks clarity and application to the scenario.	1 – 3
	Level 2	Suggests at least two suitable KPIs. The explanation of measurement and the justification lacks some clarity and/or application to the scenario.	4 – 6
	Level 3	Suggests at least three suitable KPIs. The explanation of measurement and the justification is mostly clear and applied to the scenario.	7 – 9

<b>SECTION 4</b>			
<b>Task (a): Explain</b> what the variances shown in Schedule 1 for Store 1 and Store 2 mean, giving possible reasons why the variances have occurred.			
<b>Trait</b>			
Price and quantity	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some technical understanding of price and quantity variances. The explanation lacks clarity, technical accuracy and the reasons given may not relate to the scenario or are relevant for the variance.	1 – 2
	Level 2	Demonstrates a reasonable technical understanding of price and quantity variances. The explanation lacks some clarity, technical accuracy and/or the reasons given may not relate to the scenario or are relevant for the variance.	3 – 4
	Level 3	Demonstrates a good technical understanding of price and quantity variances. The explanation is mostly clear, technically accurate and the reasons given mostly relate to the scenario and are relevant for the variance.	5 – 6
Sales mix	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some technical understanding of mix variances. The explanation lacks clarity, technical accuracy and the reasons given may not relate to the scenario or are relevant for the variance.	1 – 2
	Level 2	Demonstrates a reasonable technical understanding of mix variances. The explanation lacks some clarity, technical accuracy and/or the reasons given may not relate to the scenario or are relevant for the variance.	3 – 4
	Level 3	Demonstrates a good technical understanding of mix variances. The explanation is mostly clear, technically accurate and the reasons given mostly relate to the scenario and are relevant for the variance.	5 – 6

<b>SECTION 4 (continued)</b>			
<b>Task (b): Explain</b> the direct and indirect costs per sales transaction of the retail service provided in our stores, including the difficulties we would face when determining these direct and indirect costs per sales transaction.			
<b>Trait</b>			
Direct	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates a general understanding of direct costs. The explanation of difficulties of determining and examples lacks clarity, detail and reference to the scenario and information given.	1 – 2
	Level 2	Demonstrates a general understanding of direct costs. The explanation of difficulties of determining and examples lacks some clarity, detail and/or reference to the scenario and information given.	3 – 4
	Level 3	Demonstrates a general understanding of direct costs. The explanation of difficulties of determining and examples is mostly clear, detailed and referenced to the scenario and information given.	5
<b>Trait</b>			
Indirect	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates a general understanding of indirect costs. The explanation of difficulties of determining and examples lacks clarity, detail and reference to the scenario and information given.	1 – 3
	Level 2	Demonstrates a general understanding of indirect costs. The explanation of difficulties of determining and examples lacks some clarity, detail and/or reference to the scenario and information given.	4 – 6
	Level 3	Demonstrates a general understanding of indirect costs. The explanation of difficulties of determining and examples is mostly clear, detailed and referenced to the scenario and information given.	7 – 8

## Operational Level Case Study November 2024 & February 2025

### Marking Guidance

#### Variant 5

##### About this marking scheme

This marking scheme has been prepared for the CGMA Professional Qualification Operational Case Study [November 2024 & February 2025].

The indicative answers will show the expected or most orthodox approach; however, the nature of the case study examination tasks means that a range of responses will be valid. The descriptors within this level-based marking scheme are holistic and can accommodate a range of acceptable responses.

General marking guidance is given below, and markers are subject to extensive training, standardisation activities and ongoing monitoring to ensure that judgements are made correctly and consistently.

Care must be taken not to make too many assumptions about future marking schemes on the basis of this document. While the guiding principles remain constant, details may change depending on the content of a particular case study examination form.

##### General marking guidance

- Marking schemes should be applied positively, with candidates rewarded for what they have demonstrated and not penalised for omissions.
- All marks on the scheme are designed to be awarded and full marks should be awarded when all level descriptor criteria are met.

- The marking scheme and indicative answers are provided as a guide to markers. They are not intended to be exhaustive and other valid approaches must be rewarded. Equally, students do not have to make all of the points mentioned in the indicative answers to receive the highest level of the marking scheme.
- An answer which does not address the requirements of the task must be awarded no marks. Markers should mark according to the marking scheme and not their perception of where the passing standard may lie. Where markers are in doubt as to the application of the marking scheme to a particular candidate script, they must contact their lead marker.

## How to use this levels-based marking scheme

### 1. Read the candidate's response in full

### 2. Select the level

- For each trait in the marking scheme, read each level descriptor and select one, using a best-fit approach.
- The response does not need to meet all of the criteria of the level descriptor – it should be placed at the level where it meets more of the criteria of this level than the criteria of the other levels.
- If the work fits more than one level, judge which one provides the best match.
- If the work is on the borderline between two levels, then it should be placed either at the top of the lower band or the bottom of the higher band, depending on where it fits best.

### 3. Select a mark within the level

- Once you have selected the level, you will need to choose the mark to apply.
- A small range of marks may be given at each level. You will need to use your professional judgement to decide which mark to allocate.
- If the answer is of high quality and convincingly meets the requirements of the level, then you should award the highest mark available. If not, then you should award a lower mark within the range available, making a judgement on the overall quality of the answer in relation to the level descriptor.

Summary of the core activities tested within each sub-task

Sub-task		Core activity	Sub-task weighting (% section time)
<b>Section 1</b>			
(a)	<b>B</b>	Prepare budget information and assess its use for planning and control purposes.	<b>44%</b>
(b)	<b>B</b>	Prepare budget information and assess its use for planning and control purposes.	<b>24%</b>
(c)	<b>F</b>	Prepare information to manage working capital.	<b>32%</b>
<b>Section 2</b>			
(a)	<b>D</b>	Apply relevant financial reporting standards and corporate governance, ethical and tax principles.	<b>44%</b>
(b)	<b>A</b>	Prepare costing information for different purposes to meet the needs of management.	<b>56%</b>
<b>Section 3</b>			
(a)	<b>D</b>	Apply relevant financial reporting standards and corporate governance, ethical and tax principles.	<b>24%</b>
(b)	<b>E</b>	Prepare information to support short-term decision making.	<b>32%</b>
(c)	<b>E</b>	Prepare information to support short-term decision making.	<b>44%</b>
<b>Section 4</b>			
(a)	<b>C</b>	Analyse performance using financial and non-financial information.	<b>64%</b>
(b)	<b>C</b>	Analyse performance using financial and non-financial information.	<b>36%</b>

<b>SECTION 1</b>			
<b>Task (a): Explain</b> what the time series information in Schedule 1 indicates about demand for cabin bags in Hland over the period of the time series and whether this information is useful for determining forecast sales of our cabin bags for the period February to June 2025.			
<b>Trait</b>			
Time series indicates	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of what the trend line and seasonal variations indicate about demand for cabin bags in Hland. The explanation lacks clarity, detail and reference to the information given.	1 – 2
	Level 2	Demonstrates a reasonable understanding of what the trend line and seasonal variations indicate about demand for cabin bags in Hland. The explanation lacks some clarity, detail and/or reference to the information given.	3 – 4
	Level 3	Demonstrates a good understanding of what the trend line and seasonal variations indicate about demand for cabin bags in Hland. The explanation is mostly clear, detailed and makes reference to the information given.	5
Usefulness	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Provides some explanation of whether this information is useful for determining a sales forecast. The explanation lacks clarity, detail and application to the scenario.	1 – 2
	Level 2	Provides a reasonable explanation of whether this information is useful for determining a sales forecast. The explanation lacks some clarity, detail and/or reference to the scenario.	3 – 4
	Level 3	Provides a good explanation of whether this information is useful for determining a sales forecast. The explanation is mostly clear, detailed and applied to the scenario.	5 – 6

<b>SECTION 1 (continued)</b>			
<b>Task (b): Explain</b> why it is important for planning and control purposes to revise our budgets for the year ending 30 June 2025 to include the impact of the new range.			
<b>Trait</b>			
Revising budgets	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of why it is important to revise the budget for planning and/or control purposes. The explanation lacks clarity, detail and application to the scenario.	1 – 2
	Level 2	Demonstrates a reasonable understanding of why it is important to revise the budget for planning and/or control purposes. The explanation lacks some clarity, detail and/or application to the scenario.	3 – 4
	Level 3	Demonstrates a good understanding of why it is important to revise the budget for planning and control purposes. The explanation is mostly clear, detailed and applied to the scenario.	5 – 6
<b>Task (c): Explain</b> the impact of taking both types of discount from our suppliers on our investment in working capital for the new range of cabin bags. Please also explain the non-financial and other financial issues that we need to consider when deciding whether to take advantage of these discounts.			
<b>Trait</b>			
Working capital	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Explains the impact on the investment in working capital with limited accuracy and a lack of clarity. The explanation of issues to consider is limited and lacks application to the scenario.	1 – 3
	Level 2	Explains the impact on the investment in working capital with reasonable accuracy but possibly a lack of clarity. The explanation of issues to consider is reasonable but lacks application to the scenario.	4 – 6
	Level 3	Explains the impact on the investment in working capital with technical accuracy and clarity. The explanation of issues to consider is clear and is applied to the scenario.	7 – 8

<b>SECTION 2</b>			
<b>Task (a): Explain</b> how the lease for the laser cutting machine, as detailed in Table 1, will be initially recorded and then subsequently measured in our financial statements for the year ending 30 June 2025.			
<b>Trait</b>			
Initially recorded	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of how the lease liability and/or right-of-use asset will be initially recorded. The explanation lacks technical accuracy, clarity and reference to the information given.	1 – 2
	Level 2	Demonstrates a reasonable understanding of how the lease liability and right-of-use asset will be initially recorded. The explanation lacks some technical accuracy, clarity and/or reference to the information given.	3 – 4
	Level 3	Demonstrates a good understanding of how the lease liability and right-of-use asset will be initially recorded. The explanation is mostly clear, technically accurate and references the information given.	5 – 6
Subsequently measured	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of how the lease liability and/or right-of-use asset will be subsequently measured. The explanation lacks technical accuracy, clarity and reference to the information given.	1 – 2
	Level 2	Demonstrates a reasonable understanding of how the lease liability and right-of-use asset will be subsequently measured. The explanation lacks some technical accuracy, clarity and/or reference to the information given.	3 – 4
	Level 3	Demonstrates a good understanding of how the lease liability and right-of-use asset will be subsequently measured. The explanation is mostly clear, technically accurate and references the information given.	5

<b>SECTION 2 (continued)</b>			
<b>Task (b): Explain</b> how an ABC approach would differ to our current costing approach for the Cutting Department. Please illustrate your explanation with examples of costs and cost drivers for each of the three processes in Schedule 1.			
<b>Trait</b>			
ABC differs	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of how an ABC approach would differ. The explanation lacks clarity, detail and application to the scenario.	1 – 2
	Level 2	Demonstrates a reasonable understanding of how an ABC approach would differ. The explanation lacks some clarity, detail and/or application to the scenario.	3 – 4
	Level 3	Demonstrates a good understanding of how an ABC approach would differ. The explanation is mostly clear, detailed and applied to the scenario.	5 – 6
Costs and cost drivers	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Provides suitable examples of costs and/or cost drivers for at least one process. The explanation lacks clarity, detail and reference to the information given.	1 – 3
	Level 2	Provides suitable examples of costs and/or cost drivers for at least two processes. The explanation lacks some clarity, detail and/or reference to the information given.	4 – 6
	Level 3	Provides suitable examples of costs and cost drivers for three processes. The explanation is mostly clear, detailed and references the information given.	7 – 8

<b>SECTION 3</b>			
<b>Task (a): Explain</b> how to account for the damaged sewing machine in our financial statements for the year ending 30 June 2025.			
<b>Trait</b>			
Impairment	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of how to account for the damaged sewing machine. The explanation lacks clarity, technical accuracy and application to the information given.	1 – 2
	Level 2	Demonstrates a reasonable understanding of how to account for the damaged sewing machine. The explanation lacks some clarity, technical accuracy and/or reference to the information given.	3 – 4
	Level 3	Demonstrates a good understanding of how to account for the damaged sewing machine. The explanation is mostly clear, technically accurate and references the information given.	5 – 6
<b>Task (b): Explain</b> the maximax, maximin and minimax regret decision criteria and how each of these can be applied to the information in Schedule 1 to decide which supplier to choose. Please state which supplier would be chosen for each criterion.			
<b>Trait</b>			
Supplier decision	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates a technical understanding of at least one of the decision criteria. The explanation lacks clarity and reference to the information given.	1 – 3
	Level 2	Demonstrates a technical understanding of at least two of the decision criteria. The explanation lacks some clarity and/or reference to the information given.	4 – 6
	Level 3	Demonstrates a technical understanding of all three decision criteria. The explanation is mostly clear and references the information given.	7 – 8

<b>SECTION 3 (continued)</b>			
<b>Task (c): Explain</b> Graph 1 and how to verify that where lines A and B intersect is the optimal solution. Please also explain why it is financially beneficial to order additional fabric at the higher price and how to determine, based on Graph 1, how much additional specialist fabric we would order.			
<b>Trait</b>			
Graph 1 and optimal	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Explains some elements of Graph 1 and/or how to confirm the optimal solution. The explanation lacks clarity, technical accuracy and reference to the information given.	1 – 2
	Level 2	Explains elements of Graph 1 and/or how to confirm the optimal solution. The explanation lacks some clarity, technical accuracy and/or reference to the information given.	3 – 4
	Level 3	Explains Graph 1 and how to confirm the optimal solution. The explanation is mostly clear, technically accurate and references the information given.	5 – 6
Additional fabric	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of shadow price and/or how to determine how much to order. The explanation lacks clarity, technical accuracy and reference to the information given.	1 – 2
	Level 2	Demonstrates a reasonable understanding of shadow price and/or how to determine how much to order. The explanation lacks some clarity, technical accuracy and/or reference to the information given.	3 – 4
	Level 3	Demonstrates a good understanding of shadow price and how to determine how much to order. The explanation is mostly clear, technically accurate and references the information given.	5

<b>SECTION 4</b>			
<b>Task (a): Explain</b> what each of the variances shown in Table 1 means and possible reasons for their occurrence, based on the information above.			
<b>Trait</b>			
Raw material variances	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates a technical understanding of the meaning of one of the variances. The explanation lacks clarity and any reasons given are likely to be inappropriate.	1
	Level 2	Demonstrates a technical understanding of the meaning of at least one of the variances. The explanation lacks some clarity and any reasons may be inappropriate.	2 – 3
	Level 3	Demonstrates a technical understanding of the meaning of both variances. The explanation is mostly clear and the reasons given are appropriate.	4
Direct labour variances	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates a technical understanding of the meaning of at least one of the variances. The explanation lacks clarity and any reasons given are likely to be inappropriate.	1 – 2
	Level 2	Demonstrates a technical understanding of the meaning of at least two of the variances. The explanation lacks some clarity and any reasons may be inappropriate.	3 – 4
	Level 3	Demonstrates a technical understanding of the meaning of all three variances. The explanation is mostly clear and the reasons given are mostly appropriate.	5 – 6

<b>SECTION 4 (continued)</b>			
<b>Task (a) continued: Explain</b> what each of the variances shown in Table 1 means and possible reasons for their occurrence, based on the information above and the KPI information in Table 2.			
<b>Trait</b>			
Fixed overhead variances	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	<b>Level 1</b>	Demonstrates a technical understanding of the meaning of at least one of the variances. The explanation lacks clarity and any reasons given are likely to be inappropriate.	1 – 2
	<b>Level 2</b>	Demonstrates a technical understanding of the meaning of at least two of the variances. The explanation lacks some clarity and any reasons may be inappropriate.	3 – 4
	<b>Level 3</b>	Demonstrates a technical understanding of the meaning of all three variances. The explanation is mostly clear and the reasons given are appropriate.	5 – 6
<b>Task (b): Explain</b> why each of the KPIs in Table 2 are suitable for measuring the performance of the Cutting Department and what these measures indicate about performance of the department over the period.			
<b>Trait</b>			
KPIs	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	<b>Level 1</b>	Provides some justification and makes some attempt to explain performance for at least one of the KPIs. The explanation lacks clarity and application to the scenario.	1 – 3
	<b>Level 2</b>	Provides a reasonable justification and makes a reasonable attempt to explain performance for at least two of the KPIs. The explanation lacks some clarity and/or application to the scenario.	4 – 6
	<b>Level 3</b>	Provides a good justification and makes a reasonable attempt to explain performance for all KPIs. The explanation is mostly clear and applied to the scenario.	7 – 9

## Operational Level Case Study November 2024 & February 2025

### Marking Guidance

#### Variant 6

#### About this marking scheme

This marking scheme has been prepared for the CGMA Professional Qualification Operational Case Study [November 2024 & February 2025].

The indicative answers will show the expected or most orthodox approach; however, the nature of the case study examination tasks means that a range of responses will be valid. The descriptors within this level-based marking scheme are holistic and can accommodate a range of acceptable responses.

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Care must be taken not to make too many assumptions about future marking schemes on the basis of this document. While the guiding principles remain constant, details may change depending on the content of a particular case study examination form.

#### General marking guidance

- Marking schemes should be applied positively, with candidates rewarded for what they have demonstrated and not penalised for omissions.
- All marks on the scheme are designed to be awarded and full marks should be awarded when all level descriptor criteria are met.

- The marking scheme and indicative answers are provided as a guide to markers. They are not intended to be exhaustive and other valid approaches must be rewarded. Equally, students do not have to make all of the points mentioned in the indicative answers to receive the highest level of the marking scheme.
- An answer which does not address the requirements of the task must be awarded no marks. Markers should mark according to the marking scheme and not their perception of where the passing standard may lie. Where markers are in doubt as to the application of the marking scheme to a particular candidate script, they must contact their lead marker.

## How to use this levels-based marking scheme

### 1. Read the candidate's response in full

### 2. Select the level

- For each trait in the marking scheme, read each level descriptor and select one, using a best-fit approach.
- The response does not need to meet all of the criteria of the level descriptor – it should be placed at the level where it meets more of the criteria of this level than the criteria of the other levels.
- If the work fits more than one level, judge which one provides the best match.
- If the work is on the borderline between two levels, then it should be placed either at the top of the lower band or the bottom of the higher band, depending on where it fits best.

### 3. Select a mark within the level

- Once you have selected the level, you will need to choose the mark to apply.
- A small range of marks may be given at each level. You will need to use your professional judgement to decide which mark to allocate.
- If the answer is of high quality and convincingly meets the requirements of the level, then you should award the highest mark available. If not, then you should award a lower mark within the range available, making a judgement on the overall quality of the answer in relation to the level descriptor.

Summary of the core activities tested within each sub-task

Sub-task		Core activity	Sub-task weighting (% section time)
<b>Section 1</b>			
(a)	<b>C</b>	Analyse performance using financial and non-financial information.	<b>44%</b>
(b)	<b>A</b>	Prepare costing information for different purposes to meet the needs of management.	<b>56%</b>
<b>Section 2</b>			
(a)	<b>F</b>	Prepare information to manage working capital.	<b>28%</b>
(b)	<b>F</b>	Prepare information to manage working capital.	<b>24%</b>
(c)	<b>C</b>	Analyse performance using financial and non-financial information.	<b>48%</b>
<b>Section 3</b>			
(a)	<b>B</b>	Prepare budget information and assess its use for planning and control purposes.	<b>36%</b>
(b)	<b>B</b>	Prepare budget information and assess its use for planning and control purposes.	<b>32%</b>
(c)	<b>E</b>	Prepare information to support short-term decision making.	<b>32%</b>
<b>Section 4</b>			
(a)	<b>D</b>	Apply relevant financial reporting standards and corporate governance, ethical and tax principles.	<b>40%</b>
(b)	<b>D</b>	Apply relevant financial reporting standards and corporate governance, ethical and tax principles.	<b>24%</b>
(c)	<b>E</b>	Prepare information to support short-term decision making.	<b>36%</b>

<b>SECTION 1</b>			
<b>Task (a): Explain</b> what each of the variances in Table 1 means and possible reasons for their occurrence.			
<b>Trait</b>			
Expenditure	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of the meaning of the variances. The explanation lacks technical accuracy and clarity. The reasons given might not relate to the correct variance.	1 – 2
	Level 2	Demonstrates a reasonable understanding of the meaning of the variances. The explanation lacks some technical accuracy and clarity. The reasons given might not always relate to the correct variance.	3 – 4
	Level 3	Demonstrates a good understanding of the meaning of the variances, and the distinction between these two types of expenditure variance. The explanation is mostly technically accurate and clear. The reasons given mostly relate to the correct variance.	5
Efficiency and capacity	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of the meaning of the variances. The explanation lacks technical accuracy and clarity. The reasons given might not relate to the correct variance.	1 – 2
	Level 2	Demonstrates a reasonable understanding of the meaning of the variances. The explanation lacks some technical accuracy and clarity. The reasons given might not always relate to the correct variance.	3 – 4
	Level 3	Demonstrates a good understanding of the meaning of the variances. The explanation is mostly technically accurate and clear. The reasons given mostly relate to the correct variance.	5 – 6

<b>SECTION 1 (continued)</b>			
<b>Task (b): Explain</b> the potential benefits to our business of integrated internal systems and automated external links if we implement a digital costing system. Please use the information in Table 2 to support your explanation.			
<b>Trait</b>			
Integrated internal systems	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of the potential benefits of integrated internal systems. The explanation lacks clarity and application to the information provided and the scenario.	1 – 2
	Level 2	Demonstrates a reasonable understanding of the potential benefits of integrated internal systems. The explanation lacks some clarity and/or application to the information provided and the scenario.	3 – 4
	Level 3	Demonstrates a good understanding of the potential benefits of integrated internal systems. The explanation is mostly clear and applied to the information provided and the scenario.	5 – 6
Automated external links	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of the potential benefits of automated external links. The explanation lacks clarity and application to the information provided and the scenario.	1 – 3
	Level 2	Demonstrates a reasonable understanding of the potential benefits of automated external links. The explanation lacks some clarity and/or application to the information provided and the scenario.	4 – 6
	Level 3	Demonstrates a good understanding of the potential benefits of automated external links. The explanation is mostly clear and applied to the information provided and the scenario.	7 – 8

<b>SECTION 2</b>			
<b>Task (a): Explain</b> the factors we should consider when determining credit limits for retailers, with reference to the information in Table 1.			
<b>Trait</b>			
Credit limits	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of the factors to consider when determining credit limits for retailers. The explanation lacks clarity, detail and reference to the information provided.	1 – 2
	Level 2	Demonstrates a reasonable understanding of the factors to consider when determining credit limits for retailers. The explanation lacks some clarity, detail and/or reference to the information provided.	3 – 5
	Level 3	Demonstrates a good understanding of the factors to consider when determining credit limits for retailers. The explanation is mostly clear, detailed and referenced to the information provided.	6 – 7
<b>Task (b): Explain</b> any other information that would be helpful when assessing the creditworthiness of GlamHouse and PW Finns.			
<b>Trait</b>			
Other information	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of the other information that would be useful. The explanation lacks clarity, detail and application to the scenario.	1 – 2
	Level 2	Demonstrates a reasonable understanding of the other information that would be useful. The explanation lacks some clarity, detail and/or application to the scenario.	3 – 4
	Level 3	Demonstrates a good understanding of the other information that would be useful. The explanation is mostly clear, detailed and applied to the scenario.	5 – 6

**SECTION 2 (continued)**

**Task (c): Suggest** four KPIs that are appropriate to monitor the performance of the new credit controller. Please explain how each KPI would be measured and justify why it would be appropriate.

<b>Trait</b>			
KPIs	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	<b>Level 1</b>	Suggests at least one relevant KPI. The explanation of how to measure the KPI(s) and why appropriate lacks clarity, detail and application to the scenario.	1 – 4
	<b>Level 2</b>	Suggests at least two relevant KPIs. The explanation of how to measure the KPIs and why appropriate lacks some clarity, detail and/or application to the scenario.	5 – 8
	<b>Level 3</b>	Suggests at least three relevant KPIs. The explanation of how to measure the KPIs and why appropriate is mostly clear, detailed and applied to the scenario.	9 – 12

<b>SECTION 3</b>			
<b>Task (a): Explain</b> how the employee cost budget for the Byland Distribution Centre will be established using an ABB approach.			
<b>Trait</b>			
ABB	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of how to establish the employee cost budget using ABB. The explanation lacks clarity, detail and application to the information given.	1 – 3
	Level 2	Demonstrates a reasonable understanding of how to establish the employee cost budget using ABB. The explanation lacks some clarity, detail and/or application to the information given.	4 – 6
	Level 3	Demonstrates a good understanding of how to establish the employee cost budget using ABB. The explanation is mostly clear, detailed and applied to the information given.	7 – 9

<b>SECTION 3 (continued)</b>			
<b>Task (b): Explain</b> two potential difficulties and two potential benefits of using ABB to establish the employee costs budget for the Byland Distribution Centre.			
<b>Trait</b>			
Difficulties	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Provides one difficulty of using ABB to establish this budget. The explanation lacks clarity and application to the scenario.	1
	Level 2	Provides at least one difficulty of using ABB to establish this budget. The explanation lacks some clarity and/or application to the scenario.	2 – 3
	Level 3	Provides two difficulties of using ABB to establish this budget. The explanation is mostly clear and applied to the scenario.	4
Benefits	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Provides one benefit of using ABB to establish this budget. The explanation lacks clarity and application to the scenario.	1
	Level 2	Provides at least one benefit of using ABB to establish this budget. The explanation lacks some clarity and/or application to the scenario.	2 – 3
	Level 3	Provides two benefits of using ABB to establish this budget. The explanation is mostly clear and applied to the scenario.	4

<b>SECTION 3 (continued)</b>			
<b>Task (c): Explain</b> what sensitivity means in this context and what the information shown in Schedule 2 indicates about the most and least sensitive measures. Please also explain why the level of sensitivity differs for different budget items.			
<b>Trait</b>			
Sensitivity information	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of the sensitivity information. May not address why the sensitivities differ. The explanation lacks clarity and reference to the information given.	1 – 3
	Level 2	Demonstrates a reasonable understanding of the sensitivity information. Makes a limited attempt to address why the sensitivities differ. The explanation lacks some clarity and/or reference to the information given.	4 – 6
	Level 3	Demonstrates a good understanding of the sensitivity information. Makes a reasonable attempt to address why the sensitivities differ. The explanation is mostly clear and referenced to the information given.	7 – 8

<b>SECTION 4</b>			
<b>Task (a): Explain</b> , with appropriate justification, how the laser cutting machine detailed in Table 1 will be classified and measured in our financial statements for the year ending 30 June 2025.			
<b>Trait</b>			
Classification	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of how the asset will be classified and why this is the case. The explanation lacks clarity, detail and application to the scenario.	1 – 2
	Level 2	Demonstrates a reasonable understanding of how the asset will be classified and why this is the case. The explanation lacks some clarity, detail and/or application to the scenario.	3 – 4
	Level 3	Demonstrates a good understanding of how the asset will be classified and why this is the case. The explanation is mostly clear, detailed and applied to the scenario.	5 – 6
Measurement	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of how the asset will be measured and why this is the case. The explanation lacks clarity, detail and application to the scenario.	1
	Level 2	Demonstrates a reasonable understanding of how the asset will be measured and why this is the case. The explanation lacks some clarity, detail and/or application to the scenario.	2 – 3
	Level 3	Demonstrates a good understanding of how the asset will be measured and why this is the case. The explanation is mostly clear, detailed and applied to the scenario.	4

<b>SECTION 4 (continued)</b>			
<b>Task (b): Explain</b> , with appropriate justification, how the sewing machine detailed in Table 1 will be measured in our financial statements for the year ending 30 June 2025.			
<b>Trait</b>			
Sewing machine	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates some understanding of how the asset will be measured and why this is the case. The explanation lacks clarity, detail and application to the scenario.	1 – 2
	Level 2	Demonstrates a reasonable understanding of how the asset will be measured and why this is the case. The explanation lacks some clarity, detail and/or application to the scenario.	3 – 4
	Level 3	Demonstrates a good understanding of how the asset will be measured and why this is the case. The explanation is mostly clear, detailed and applied to the scenario.	5 – 6
<b>Task (c): Explain</b> how to decide the order size using a risk seeking, risk neutral and risk averse approach, in each case giving the order size chosen. Please include one limitation of each decision approach.			
<b>Trait</b>			
Order size decision	<b>Level</b>	<b>Descriptor</b>	<b>Marks</b>
		No rewardable material	0
	Level 1	Demonstrates technical understanding of at least one of the approaches. The explanation lacks clarity, technical accuracy and reference to the information given.	1 – 3
	Level 2	Demonstrates a technical understanding of at least two of the approaches. The explanation lacks some clarity, technical accuracy and reference to the information given.	4 – 6
	Level 3	Demonstrates a technical understanding of all three approaches. The explanation is mostly clear, technically accurate and referenced to the information given.	7 – 9