



APC
Accounting Practise Center

CIMA/CGMA

Operational Case

Study

Case Book



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Preseen Application

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Your role

As Finance Officer, you are there to support decisions, not merely produce numbers. In the exam, that means you should think like someone who helps managers choose between options using costing, budgeting, cash flow, performance and risk analysis — while also being able to comment on financial reporting and tax where needed.

Company background

SoPa's success is built on a very specific brand promise:

authentic Latin American-inspired food, restaurant-quality execution, modern/relaxed atmosphere, and affordability. That means any recommendation you make should protect this positioning. A proposal that improves profit but weakens quality, consistency or brand identity could damage what made the business successful in the first place.

This is a founder-led business with strong operational roots.

Paolo brings product and kitchen credibility; Sofia brings front-of-house and customer experience expertise. SoPa's original success came from that combination. The implication is that food quality and service quality are the two pillars of performance, and both must be preserved as the business grows.

The business is moving from entrepreneurial start-up to scaled chain operator.

Growing from 1 restaurant in 2016 to 9 by 2026 is fast expansion. The key issue now is no longer "can the concept work?" but "can it be replicated consistently?" As SoPa scales, finance becomes more important for control, standardisation, planning, investment appraisal, and avoiding overexpansion.

Expansion beyond Tombor changes the risk profile.

Growth into other cities means more revenue opportunity, but also more complexity: managing staff, maintaining standards, forecasting demand, and controlling costs across multiple locations. In exam answers, this means you should often discuss not just upside, but also execution risk, working capital pressure and control systems.

The company is profitable, but margins are not so high that mistakes can be absorbed easily.

Revenue of Z\$41.7m, gross margin of 32.6% and operating margin of 9.4% show a solid business, but restaurant businesses are still exposed to cost increases and operational slip-ups. So the finance view should be: growth is possible, but every proposal must be tested for margin impact, cash impact and operational feasibility.

Ownership matters.

SoPa is still 100% owned by Paolo and Sofia, so it is likely they will care strongly about control, brand, legacy and careful growth. In practice, this means recommendations should usually fit an owner-managed mindset: realistic, cash-conscious, brand-protective, and not overly dependent on giving up ownership or taking reckless risks.

With over 300 staff, people management is now strategically important, not just operational.

At small scale, founders can shape culture directly; at 9 restaurants, that becomes harder. So when analysing future issues, it is useful to link financial performance to staffing, training, morale, labour efficiency and service consistency.

The restaurant industry

SoPa operates in a tough market, so being "good" is not enough — it must stay clearly differentiated.

The restaurant industry in Zeeland is large but highly competitive, especially in Tombor. That means SoPa cannot rely on demand simply existing; it must keep giving customers a reason to choose it over many alternatives.

Three classic failure risks — and all three are relevant to SoPa.

Poor reviews damage reputation, fast expansion can overstretch management and cash, and too much variation can weaken the brand. In exam answers, these are likely to be key lenses for evaluating new openings, menu changes, diversification, delivery, or international expansion.

Customer experience is a strategic control issue, not just an operational one.

In this industry, food and service reviews directly affect reputation and survival. So finance decisions should not focus only on cost cutting; reducing

labour or training too far may save money short term but could destroy value through weaker service, worse reviews and lower repeat business.

Growth needs to be controlled, funded and properly staffed.

The industry explicitly links failure to overexpansion with weak management teams and insufficient working capital. So whenever SoPa considers expansion, the right finance response is not just “will revenue rise?” but also “do we have the managers, systems, cash and operational capacity to support it safely?”

Brand consistency matters because confused branding is dangerous.

Since industry failure can come from too much diversity in food and dining experience, SoPa should be careful with anything that pulls it away from its core identity. New products or formats may still work, but only if they strengthen the brand rather than dilute it.

The market is not growing fast enough to hide weak decisions.

Average industry growth of only 3% over the last 3 years means SoPa cannot depend on strong market growth to cover mistakes. Profit will come more from execution, efficiency, brand strength and careful investment choices than from simply riding a booming sector.

Cost pressure makes margin protection a major exam theme.

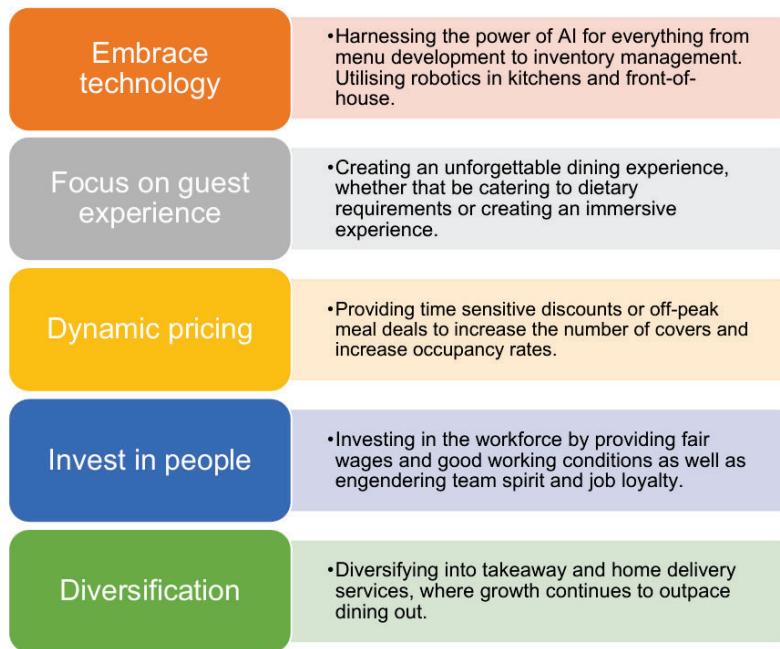
Food inflation, higher property costs and higher minimum wages all squeeze restaurant margins. So in analysis, you should keep linking proposals to contribution, gross margin, labour efficiency, pricing, and cost control. A good idea operationally still needs to be financially robust.

Labour is both an operational risk and a financial risk.

High staff turnover and recruitment difficulty mean restaurants face disruption, training costs, inconsistency in service and possible understaffing. SoPa may need to invest in pay, conditions, training and retention — not just because it is “nice,” but because it protects service quality and long-term profitability.

Industry conditions make balanced judgement important.

Please avoid extremes: not reckless growth, not crude cost cutting, not endless diversification. The better line is controlled growth, strong operational standards, brand clarity, and enough investment in people and working capital to remain sustainable.



The sector outlook is improving, but not enough for SoPa to relax.

Expected growth rising to around 4.5% means there is more opportunity than before, but the old risks still remain. So the message is: this is a better environment for expansion and innovation, but only for operators who execute well.

Technology is being positioned as a competitive advantage, not a gimmick.

AI, digital systems and possibly robotics could help SoPa improve forecasting, inventory control, labour efficiency, consistency and waste reduction. In exam terms, technology proposals should usually be assessed in terms of cost savings, service improvement, implementation cost, staff acceptance and fit with the brand.

Guest experience is central to survival because it supports reviews, repeat visits and pricing power.

In a crowded market, memorable service and food quality help SoPa stand out. That means finance recommendations should not just ask "what is cheapest?" but "what protects customer satisfaction and long-term revenue?"

Dynamic pricing is really about using spare capacity better.

Off-peak deals can raise occupancy and number of covers, which helps spread fixed costs over more customers. The key finance point is that discounting only makes sense if extra contribution from additional covers outweighs the lower selling price and does not damage the premium-but-affordable brand.

Investing in people should be seen as performance investment, not just extra cost.

Better wages, conditions and team spirit may reduce staff turnover, improve service quality and lower recruitment/training disruption. For SoPa, this could strengthen both customer experience and operational consistency across more sites.

Diversification into takeaway and delivery is a major strategic signal.

Since this area is growing faster than dine-in, it is a real opportunity. But it should be tested carefully: will it increase revenue and asset use, or dilute quality, stretch operations and weaken the dine-in experience?

All five opportunities link back to SoPa's likely future exam themes.

Expect issues around tech investment, service quality, pricing decisions, staff retention and delivery/home dining. Strong answers will usually weigh strategic benefit against financial impact, operational practicality and brand consistency.

The deeper message is that SoPa cannot rely on one lever alone.

Survival and growth will probably come from combining better operations, strong people management, smart use of technology, careful pricing and selective diversification — not from chasing growth in a single area.

Extract from the SoPa website: About us

This tells you what the SoPa brand promise is meant to be.

The website presents SoPa as authentic Latin American heritage combined with contemporary technique, local ingredients and sustainability. So in the exam, any proposal should be judged against whether it strengthens or weakens that promise.

Authenticity matters, but SoPa is not positioned as basic or cheap street food.

It is “elevated” and presented with “elegance,” which suggests a balance: accessible, but still premium in feel. That means cost-cutting, delivery models, menu changes or automation must be handled carefully so they do not make the business feel lower quality or less special.

The brand is built on story as much as product.

Paolo and Sofia’s personal journey, heritage and values are central to how SoPa presents itself. That implies founder image and brand reputation are valuable assets. Decisions should therefore be consistent with the founders’ identity and the emotional story customers are buying into, not just the food itself.

Sustainability is part of the public-facing brand, not just an internal preference.

The website openly refers to fresh local ingredients and deep respect for sustainability. So if SoPa makes future decisions on sourcing, production,

supply chain or expansion, there is reputational risk if actions do not match what the brand claims publicly.

People are clearly presented as part of the value proposition.

The website says SoPa invests in employee wellbeing and growth because inspired teams create memorable experiences. So in exam answers, staff spending should not always be treated as a cost to minimise; it may be an investment that supports service quality, customer satisfaction and brand delivery.

Innovation is expected — but only if it fits the heritage.

The phrase “rooted in heritage, shaped by experience, powered by innovation” is very important. It suggests SoPa can innovate, but not in a way that abandons authenticity. So for new products, delivery, technology or expansion, the right argument is usually “innovate without diluting the core brand.”

This website creates customer expectations that operations must actually deliver.

The messaging promises memorable experiences, quality, care for people and sustainability. If the real customer experience falls short, reviews and reputation will suffer more because the gap between promise and reality becomes obvious.

From a finance perspective, this extract helps you judge strategic fit.

When evaluating options, don't just ask whether something makes money; ask whether it is consistent with SoPa's stated identity, because long-term financial success depends on protecting the brand customers believe in.

Restaurant menu

 <p>SoPa RESTAURANT</p>	<p>Main Street Tombol www.SoPa.dab.ac.ol</p>	<p>DRINKS</p> <p>DRINKS FROM Z\$3 – Z\$15 Alcoholic and alcohol-free drinks and cocktails</p> <p>HOT DRINKS FROM Z\$4 A variety of national and international hot drinks</p>
<p>STARTERS</p> <p>CEVICHE CLASSICO Z\$13 Fresh sea bass cured in lime juice with red onion, sweet potato and cancha corn</p> <p>CHICKEN TACOS Z\$10 Pulled chicken marinated in annatto and orange served on soft organic corn tortillas with pickled slaw</p> <p>BLACK BEAN TOSTADA Z\$9 Crisp corn based topped with smashed beans, smoky chipotle, pickled red onion and cotija cheese</p> <p>SALADS & SPECIALS Z\$11/Z\$12 Seasonal dishes which change weekly. Please ask your server for details</p> <hr/> <p>DESSERTS</p> <p>MOLTEN CARAMEL CAKE Z\$8 Soft centred cake with coconut sorbet</p> <p>VANILLA QUINOA PUDDING Z\$8 Creamy and topped with roasted pineapple and lime (vegan)</p> <p>CINAMMON CHURROS WITH SPICED CHOCOLATE Z\$8 Served hot with chilli chocolate dip</p> <p>ASSORTED ICE CREAM Z\$6</p>	<p>MAINS</p> <p>CHICKEN WITH CHILLI SAUCE Z\$16 Pan seared chicken bread in creamy yellow chilli sauce, with quinoa pilaf and sauteed greens</p> <p>COCONUT FISH STEW Z\$19 Central American style fish stew with coconut milk, tomatoes and peppers served with farofa and rice</p> <p>STEAK CHIMICHURRI Z\$25 Chargrilled steak with chimichurri butter, crispy yucca fries and grilled organic corn</p> <p>SWEET CORN AND MUSHROOM BAKE Z\$15 Sweetcorn and mushroom baked casserole with paprika, onions and olives (vegetarian)</p> <p>SPECIAL Z\$21 Seasonal dishes which change weekly. Please ask your server for details</p> <hr/> <p>SIDES</p> <p>TORTILLAS Z\$2 ASSORTED DIPS Z\$3</p>	

The menu shows a focused, standardised concept.

There is a clear structure — starters, mains, desserts, sides and drinks — with a limited range rather than a huge menu. That is good operationally because it supports consistency, easier training, tighter purchasing and less waste. It also fits SoPa’s need to replicate the same concept across multiple restaurants.

The offer is broad enough to attract different customers, but not so broad that the brand becomes confused.

There are meat, fish and vegetarian options, plus specials, which gives variety without losing the Latin American identity. That is important because the industry section warns against too much diversity causing confused branding.

The menu supports SoPa’s “affordable but quality” positioning.

Prices are not ultra-premium, but they are high enough to signal restaurant quality rather than cheap fast food. SoPa appears to be aiming for accessible dining with a slightly elevated feel — exactly in line with the brand story.

There is a built-in upselling model.

Customers are encouraged to buy across several categories: starter, main, sides, desserts and drinks. So revenue is not just about getting people through the door, but increasing average spend per cover. In the exam, that means menu mix, pricing and attachment sales are likely to matter a lot.

Sides and drinks are strategically important, not minor extras.

Tortillas, dips and beverages may look small individually, but they are easy add-ons and likely strong contributors to profit. In analysis, these categories should be viewed as margin enhancers and potential levers for promotional activity or pricing strategy.

The specials are commercially useful.

Weekly-changing specials let SoPa keep the menu fresh, respond to seasonal availability and reinforce the idea of creativity and quality. But they also create risks around consistency, training, costing and supply planning, so finance should ensure specials are properly costed and controlled.

The menu gives clues about cost exposure.

Fresh fish, steak, dairy, fresh produce and handcrafted dishes suggest quality, but also exposure to food inflation, perishability and labour intensity. SoPa's menu is attractive, but it is not a low-risk cost model. That means gross margin control and ingredient/labour efficiency will matter a lot.

The menu is operationally dependent on skilled kitchen execution.

Many dishes are not simple assembly items; they require preparation, cooking and presentation. That means staff skill, training and labour availability directly affect customer experience, speed of service and consistency.

It also reinforces the importance of supplier reliability.

Because the menu depends on fresh ingredients and no frozen items, SoPa needs dependable supply, good stock management and waste control. So any disruption in supply chain, local sourcing changes or sustainability initiative can have a real impact on operations and margins.

Topic 5: Throughput Accounting

Principles (Pre-learnt paragraphs)

1. **Maximize Throughput Contribution:** Throughput contribution = Sales revenue – Direct material costs
2. **Reduce Operational Expenses:** Lower the costs involved in converting raw materials into finished products, such as labor and overhead.
3. **Minimize Investment in Inventory and Assets:** Reduce the amount of money tied up in inventory and non-current assets to free up cash flow.
4. **Identify and Manage Bottlenecks:** Recognize processes that slow down production and find ways to optimize or eliminate them.
5. **Optimize Product Mix Based on Bottleneck Resource:** Prioritize products that provide the highest throughput contribution per bottleneck hour.
6. **Focus on Bottleneck Utilization and Alleviation:** Ensure the bottleneck is fully utilized and consider investments to reduce bottleneck constraints.
7. **Control and Reduce Pre-Bottleneck Activities:** Limit activities before the bottleneck to prevent excess inventory and reduce costs.

Question practice about throughput accounting

Q1: (10minutes)

Finally, Jack has heard of throughput accounting and wonders if it would be of any value to our business especially as we expect an increase in demand. Please draft an explanation of:

The principles of throughput accounting and its potential benefit to our business. Use examples in our business to illustrate where possible.

(sub-task(c)=20%)

Suggested answer:

The Principles of Throughput Accounting and Its Potential Benefit to Our Business

The aim of throughput accounting is to maximize throughput contribution (sales revenue less direct materials) while simultaneously reducing operational expenses and investment. Operating expense is the cost incurred to convert raw material into the finished pencil, typically including labor and production overhead. Investment refers to the monetary value invested in inventory and non-current assets, essentially the money tied up in assets so that Lottie Graphite can generate throughput.

As we expect demand to increase, we might eventually find that some of our production processes cause delays in throughput. A process that delays throughput is known as a bottleneck. Throughput accounting would provide us with the information needed to identify bottlenecks and improve performance. We could benefit from using throughput accounting in the following ways:

- **Optimizing Product Mix:** The product mix can be optimized by maximizing the throughput contribution per hour of the bottleneck resource. This is calculated similarly to limiting factor analysis, where the bottleneck is the limiting factor. By doing so, we maximize our short-term profits through optimal production planning.
- **Focusing on Bottleneck Management:** Management's focus will shift to alleviating pressure on a bottleneck to reduce delays in the production process that decrease throughput. This may involve finding ways to ensure that the bottleneck is fully utilized. For example, if the bottleneck is the baking process, we would operate the blast furnace 24 hours a day, ensure it is filled to capacity for every bake, and load and unload as quickly as possible. Alternatively, there may be a need to invest in a new blast furnace.
- **Examining Processes Before the Bottleneck:** Any process occurring prior to the bottleneck will also be examined. For example, if raw pencil production were the bottleneck, it would be pointless to produce more spindles than could be processed, as this would increase inventory costs. Therefore, management will reduce activity in processes before the bottleneck, which will typically reduce costs.

Topic 6: Quality Costs, Environmental Costs and Weighted Benefits Scoring

Cost of Quality Framework

- The Cost of Quality (CoQ) framework categorizes quality-related costs into four main types to help organizations measure and manage the cost of ensuring quality.
 - Prevention Costs:** Costs incurred to prevent defects before they occur (e.g., training, quality improvement programs).
 - Appraisal Costs:** Costs related to measuring and monitoring activities to ensure quality (e.g., inspection, testing).
 - Internal Failure Costs:** Costs resulting from defects found before delivery to customers (e.g., rework, scrap).
 - External Failure Costs:** Costs arising when defects are found after the product reaches the customer (e.g., warranty claims, returns, loss of reputation).

Environmental costing

Category	Environmental Cost Example
Prevention Costs	- \$80,000 spent on R&D to develop a lead-free soldering process - \$20,000 on staff training for environmental compliance
Appraisal Costs	- \$15,000 for quarterly environmental audits - \$10,000 for monitoring air and water emissions
Internal Failure	- \$50,000 in scrap due to incorrect sorting of recyclable vs. hazardous waste
External Failure	- \$200,000 in environmental fines due to non-compliance with effluent standards - \$150,000 in reputational damage leading to lost contracts

Weighted Benefit Scoring

- A decision-making tool that uses weighted scores to evaluate and compare alternatives based on multiple criteria.

A company is deciding between **three software options** (A, B, and C) to improve internal project management. The criteria considered are:

- Cost**
- Ease of Use**
- Functionality**
- Customer Support**

Each criterion is assigned a **weight based on its importance**, and each option is **scored on a scale of 1–5** (5 = best).

Step 1: Define Weights

Criteria	Weight (%)
Cost	30%
Ease of Use	25%
Functionality	30%
Customer Support	15%
Total	100%

Step 2: Score Each Option

Option	Cost	Ease of Use	Functionality	Customer Support
A	5	4	3	4
B	3	5	4	5
C	4	3	5	3

Step 3: Calculate Weighted Scores

Weighted Score = (Score × Weight) summed across all criteria

Option	Cost (30%)	Ease of Use (25%)	Functionality (30%)	Support (15%)	Total Score
A	$5 \times 0.3 = 1.5$	$4 \times 0.25 = 1.0$	$3 \times 0.3 = 0.9$	$4 \times 0.15 = 0.6$	4.0
B	$3 \times 0.3 = 0.9$	$5 \times 0.25 = 1.25$	$4 \times 0.3 = 1.2$	$5 \times 0.15 = 0.75$	4.1
C	$4 \times 0.3 = 1.2$	$3 \times 0.25 = 0.75$	$5 \times 0.3 = 1.5$	$3 \times 0.15 = 0.45$	3.9

Conclusion:

Option B has the highest weighted benefit score (**4.1**) and would be the recommended choice under this scoring model.

Core activity B:

Budget

Prepare budget information and assess its use for planning and control purposes.



Assessment Outcomes:

- I can use appropriate technologies to gather data from digital and other sources to co-ordinate budget preparation.
- I can explain and use different forecasting methods to assist in budget preparation.
- I can use different approaches to produce information for use by managers when preparing budgets.
- I can explain budget information to managers using appropriate formats and media.
- I can apply various techniques to determine the effect on budgets of changes to variables.
- I can explain to functional managers how budgets are used for planning and control purposes.
- I can discuss the behavioural implications of budgetary planning and control.
- I can compare alternative approaches to budgeting to determine their suitability for the organisation and for different purposes.

Weighting: 17%-25%

SESSION CONTENTS

Topic 1: Budgeting Steps

Topic 2: Gathering data for budgets and Ethical considerations

Topic 3: Budgeting Methods

Topic 4: Using Budgets for Control

Topic 5: Forecasting

Topic 1: Budgeting Steps

Principles (Pre-learnt paragraphs)

- **Budget Manual** - detailed guidelines, roles, procedures, templates, and assumptions for preparing, reviewing, and approving budgets, ensuring consistency and alignment with organizational objectives.
- **Budget Committee** - Group overseeing budget preparation and coordination.
- **Principal Budget Factor** - Key factor limiting the organization's budget (e.g., sales).
- **Functional Budgets** - Individual budgets like sales, production, purchases, and labour.
- **Master Budget** - Consolidated budget including P/L, SFP, and cash flows.

Question practice for budgeting steps

Q: (15minutes)

An explanation of how you should construct the labour cost budget and the material usage and purchases budgets and the additional information that would be required.

Suggested Answer:

The first step in constructing the budgets is to establish the **principal budgeting factor**. In this case the principal budget factor is **sales** as we have the capacity to produce more than we can sell.

Once the **sales budget** is complete we need to determine the production budget. The production budget will be equal to the sales volume budget plus closing inventory less opening inventory.

The next budget to be determined is the material usage budget. + *(Application to the preseen processes)* Each of the departments in the factory, roasting, grinding and blending will have a material usage budget.

(Application to the preseen/unseen) For example, the bill of material for Milk Chocolate in the blending department shows that 90kg of cocoa butter is required to produce 1,000kg of chocolate. If we are planning to produce 200,000 bars of Milk Chocolate in the month, this will require 20,000kg of chocolate since each bar is 100g. We will therefore use 20 x 90kg of cocoa butter. We can then multiple the total quantity in kg by the cost per kg of N\$11.

The material usage budget is the basis for the material **purchases** budget. The material purchases budget will include an allowance for raw material that we plan to hold in inventory. The material purchases budget will be the

material usage budget plus closing inventory of raw material less opening inventory of raw material.

The starting point for the **labour** budget is the production budget which will detail how many of each type of bar/products we plan to produce. We can then determine the labour hours required and the labour costs using the information in the completed standard cost card. A standard cost card will be required for each product to enable separate labour cost budgets to be produced.

For each department, we need to establish the operations that will be carried out, the hours required for each operation and the grade of labour required.

The hours required for each operation will be based on a standard level of efficiency. We can obtain the information for the standard rate per hour for each grade of labour from the HR records.

(**Application** to the preseen processes) Once this has been completed we will have a labour cost budget for each department to produce 1,000kg of each type of chocolate. We can then use this information to calculate the total labour costs for each period depending on the production requirements in the period.

Tutorial note: Please do recap the advantages of budgets and the difference between functional and master budget* knowledge.

*A Functional budget is a budget of income and/or expenditure which applies to a particular function. When all the functional budgets have been prepared, they are summarised and consolidated into a master budget which consists of budgeted income statement; budgeted statement of financial position and cash budget.

Topic 2: Gathering data for budgets and Ethical considerations

Principles (Pre-learnt paragraphs)

Big Data

- Volume - the vast amounts of data generated and collected from various sources, such as social media, transactions, and sensors.
- Velocity - the speed at which data is generated, processed, and analyzed, often in real-time or near real-time.
- Variety - Involves the different types of data (structured, semi-structured, unstructured) from diverse sources, including text, images, videos, and more.

Key Data Sources - (from questions, internal and external ones)

Benefits - More accurate and timely forecasts; better alignment with market trends.

Limitations - Complexity in analyzing unstructured data; potential data privacy issues.

Conclusion - Emphasize the need to effectively use big data for responsive and accurate sales forecasts.

Question practice for Big Data and Sources

Q: (15minutes)

As a starting point for the budget, we need to establish a detailed sales forecast for the new range. Ben Jonas, Sales & Marketing Director, has suggested that we use an external agency that has expertise in the sourcing and use of big data. He would like to discuss this at the next Senior Management Team (SMT) meeting.

Please prepare a briefing paper for the SMT which explains:

The sources and types of big data that will assist with creating a sales forecast for the new Ready@Home range.

(sub-task(b)=28%)

Suggested Answer

Sources and Types of Big Data to Create a Sales Forecast for Ready@Home

Big data refers to structured and unstructured data, usually in digital form, created outside of an organization and available to everybody. Big data comes in two main forms: **structured data**, which is deliberately produced

and collected for a specific purpose, and **unstructured data**, which is captured passively without a clear purpose (for example, social media posts and 'likes'). The sources and types of big data that will assist with creating a sales forecast for the new Ready@Home range include the following:

- **Social Media (e.g., Facebook and Twitter)**
Unstructured data from these platforms can provide insights into customer preferences and changing trends. This helps in assessing the mix of products that may sell. For example, if soups are waning in popularity but smoothies are increasing, this will influence the expected demand for each, allowing us to forecast accordingly.
- **The Web**
There is a vast amount of data on the web, much of which is structured. Relevant types of data include:
 - **Long-range weather predictions:** Help determine when hearty and warming soups may be in higher demand.
 - **Industry briefings and reports:** Provide data about the size of the market in general.
 - **Government reports:** Offer information about levels of disposable income and potential factors affecting it, such as future interest rate rises or changes in the national minimum wage.
- **Machine-Generated Information from Home Devices**
These devices capture unstructured data about items that have been searched for (e.g., types of recipes or suppliers of vegan products).

Topic 3: Budgeting Methods

1. The basis for the next year's budget

- Incremental budget
- Zero-based budget (ZBB)

2. How often a budget will be prepared

- Rolling budget

3. Who will be involved in the preparation of budgets

- Participative budget (Bottom up approach)
- Imposed/Non-participative budget (Top down approach)

4. Activity-Based Budget (ABB)

5. Beyond Budget

6. Stress testing budget

7. What-if analysis

ZBB (Pre-learnt paragraphs)

1. Suitability of ZBB/Benefits of ZBB to our business:

- The adoption of ZBB would encourage our company name managers to **question** what is currently done and to seek alternatives which are better and lower cost.
- This would lead to the identification of non-essential costs relating to **inefficient operations** and their removal from the budget for the forthcoming period. (*Tutorial note: most preseen companies use incremental budgeting method, if this is the case, use this one:* Our present system of incremental budgeting doesn't remove such inefficiencies.)
- ZBB is very much **future focused** unlike the current system of incremental budgeting which is backward looking and bases next year's budget on what has happened in the past. (*Tutorial note: most preseen companies use incremental budgeting method, if this is the case, use this one*)
- ZBB would require higher levels of **involvement of all levels of our staff** since significantly more information would be required to complete our budget. Preparation of the decision packages will normally require the involvement of many employees and therefore provide an opportunity for **their views** to be considered.
- The involvement of more of our employees in the budgetary process would not only raise levels of **budget acceptance** but also might generate useful **ideas** and promote job **satisfaction** across the wider staff.
- The adoption of ZBB within our company name will help in creating an environment in which **change** can be more easily accepted by employees in the future.
- If ZBB were to be implemented then our **resources** should be allocated in a more efficient and economic way.
- It should be noted however that ZBB is potentially **costly** in terms of using management time and hence this **limits** its benefits.
- ZBB is useful in our business because our variable costs account for a large proportion of our total costs (relate this to the preseen if this criteria is met). **Or** ZBB is applicable for discretionary costs, where any expenditure or the amount of the expenditure is at the discretion of management, for example, maintenance, marketing, R&D (*please be specific to the preseen using your imagination*) etc

2. How to implement ZBB in our business:

- There are three steps to implement ZBB in our business.
- The **first** stage in implementing a ZBB system is to **identify the activities (decision units)**.
- (*Application to the unseen or preseen:*) (Using our IT function as an example, its main activities are the provision and management of information to support the running of the organisation; the purchase and maintenance of the supporting equipment in terms of hardware

and software; the development of information systems and the training of staff).

- For each of the activities we would need to develop decision packages. There are two types of decision packages: mutually exclusive packages and incremental packages. There are costs and benefits for each decision package and managers must justify these. (**Tutorial note:** you can further expand the costs and benefits of the decision packages below when you apply them to the case.)
- (**Application to the unseen or preseen:**) Mutually exclusive decision packages might be either to employ our own staff or to outsource this to the third party outside to run this aspect of the IT service.
- Managers will need to determine which option to choose in the mutually exclusive decision package. For example, (**Application:** employing our own staff.)
- These mutually exclusive decision packages could be further broken down into incremental decision packages (minimum spent) within which the base package needs to be set to include the minimum works need to be done together with other decision packages.
- (**Application to the unseen or preseen:**) For example, the decision package to employ our own staff, the payment to the staff can be based on the fixed salary (base package) or the fixed salary plus bonus in terms of costs savings during the operation.
- The **second** stage to implement ZBB is to **evaluate** and **rank** each activity/decision package on the basis of its benefits to the company name.
- Minimum work requirements will be given high priority to meet legal obligations. For example, in accounting department, minimum requirements would be needed to operate the payroll.
- The **third** stage, once all the decision packages are identified, is to review and rank each one on a cost benefit basis. Budget resources should then be allocated on this basis.
- The evaluated packages would then be presented to the **budget committee** for a final decision about how we will actually operate the new service. The budget committee would review each of the decision packages and decide the resources that should be allocated to the IT function management depending on the combination of activities that are approved.

3. Whether ZBB or ABB/Rolling budget should be used?

Tutorial note: ZBB is not conflicting with other costing methods such as ABB, rolling budget, participative or non participatory budgets.

Use ABB as an example below:

- It is worth considering that ZBB and ABB are not necessarily mutually exclusive. Although ZBB challenges how we currently do things, once new approaches are determined they can be evaluated using activity-based thinking.
- Different activity levels will provide the base for the base package and incremental packages of ZBB. Thus it is possible to use ZBB and ABB together.

Use participatory budgeting as an example below:

Advantages of increased participation in the budget setting:

- Motivation levels may be improved as managers would set targets that were consistent with their future objectives.
- The additional work required in ZBB ensures that employees benefit by rethinking an activity from its starting point and creating efficiencies and costs savings as a result.
- The fact that staff are involved means as well that the budget is likely to be more realistic and focused on the objectives of that operation.
- Staff motivation can be increased because staff are provided with greater responsibility in their work, ie, they are always encouraged to think about ways to eliminate slacks.

Question practice for ZBB

Q: (20Minutes)

The management originally decided to outsource maintenance of the machinery in the new production facility, including the packing line and robots, and has signed a 3-month contract for this. However, it has been suggested that in 3-months' time we could set up our own machinery maintenance team. This team could take over responsibility for some or all aspects of machinery maintenance, which will include regular servicing and repairs. Jack Quinn, Finance Director, believes that this would be an ideal opportunity to trial the use of zero based budgeting (ZBB) to establish a budget for machinery maintenance costs in the new facility.

Please include in your report to the management an explanation of:

a. How a ZBB approach can be applied to create a budget for machinery maintenance costs in the new production facility.

(sub-task(b)=36%)

b. Two benefits and two challenges of using ZBB to prepare the machinery maintenance cost budget.

(sub-task(c)=32%)

Suggested answer:

Zero-Based Budgeting (ZBB)

The first stage of applying ZBB will be to decide on the decision units, which are the activities that generate cost. In this instance, the activity is machinery maintenance. For each activity, an objective is established: for example, the objective of machinery maintenance could be to ensure that machinery breakdowns are limited or that the machinery operates at an optimum speed.

For each activity, there will be potentially different ways in which its objective can be achieved or different levels of expenditure that could be

incurred. These choices are reflected in decision packages that can be mutually exclusive (different ways of achieving the objective) and/or incremental (different levels of service to achieve slightly different outcomes). For machinery maintenance, mutually exclusive decision packages could be developed for different types of maintenance or for different machinery to continue to outsource or to have our team.

Decision Packages

Decision packages can be developed for each option, starting with the base package, which is the minimum level of machinery maintenance required. We could decide with respect to the base package that we budget to only have an annual maintenance check because the machinery is new. Incremental packages will then build on this and add additional maintenance time and different activities that should be performed. For example, maybe monthly maintenance checks are performed on key machinery. While this will generate additional cost, it will help to ensure that the new robot packers keep working at their optimal speed.

After the decision packages have been fully developed with all costs quantified, a cost/benefit analysis needs to be performed, with benefits identified and quantified. One benefit of spending money on machinery maintenance is to reduce the risk of machinery breakdown, which if it happened would have a detrimental effect on our ability to assemble Party Boxes.

However, there are other benefits to maintenance in terms of keeping the machinery working optimally. These include safeguarding throughput so that we can satisfy demand and ensuring that, for example, our machinery does not damage any of the contents included in the Party Box. Regular maintenance of machinery could also prolong its useful life. Each decision package would need to be considered against these benefits and then ranked in order of preference.

Benefits and Challenges of Using a ZBB Approach

Benefits

A benefit of using ZBB to create a budget for machinery maintenance costs in the new production facility is that it would force management to focus on both the costs and benefits of different maintenance options through the development of decision packages. This would help management to focus on the effectiveness of these different options and to ensure that resources are allocated to the most effective option, which might well be to continue to outsource. This approach would also help to ensure that machinery maintenance is viewed as an important function by all managers, rather than just a drain on resources. Quantifying and then discussing the benefits of spending money on machinery maintenance would help managers to appreciate the need for the activity.

Challenges

A key challenge of applying a ZBB approach is the amount of time that will be required to implement it. Creating decision packages that are fully costed and justified is time-consuming. In addition, as we have not used ZBB before, training will be required and it's possible that the production managers that would need to be involved in the process may resent being asked to do it, if they do not foresee any personal benefit.

Another challenge is that establishing some of the benefits of the decision packages can be difficult. For example, we can probably estimate the impact of avoiding a 1-day machinery breakdown in terms of lost production for that day, but what is harder to quantify is the impact of lost sales on customer goodwill and therefore future sales. The intangible nature of many of the benefits also leads to issues when ranking decision packages because quantitative information is much easier to compare than qualitative information.

Rolling budgets (Pre-learnt paragraphs)

Explain what is rolling budget and its benefits:

- This is a budget that is continually updated for the latest plans as time moves on. When an accounting period ends then another new accounting period is added in (whether this can be a month, quarter or on another basis).
- *(Unseen question requirement: For the cash budget)* I would suggest that we set out budget period for say three months. Within the budget period we would then break it down further to weekly or possibly month periods. Each time a week or a month passes it would be removed from the budget and the next period added. That way the cash budget *(Unseen question requirement: For the cash budget)* will always extend ahead for the whole budget period of three months
- By continually updating the budget and keeping the overall budget period relatively short, we will have a much better idea of what our (cash) position is likely to be and hence can plan accordingly. *(Given an example, for cash budget, it would be the cash deficit or surplus, corresponding actions would be needed. For other budgets such as sales budget, it may be above or below our expectation: If a deficit is forecast then we can make arrangements to organise overdraft facilities or loan facilities.)*
- It will allow us to plan and will focus on areas of the business where perhaps performance isn't as it should be. (For example, the rolling cash budget could indicate that we are not receiving cash from our concession partners as quickly as we should and therefore we could take corrective action to rectify this.)

Question practice for rolling budget

Q (20Minutes)

In view of the uncertainty, I would also like to consider whether it may be worthwhile using a rolling budget approach for all our budgets, rather than our current approach where we budget annually.

Please include in the briefing paper an explanation of:

The potential advantages and disadvantages of adopting a rolling budget approach compared to our current budgeting approach."

(sub-task(c)=40%)

Suggested Answer:

Advantages and Disadvantages of Adopting Rolling Budgets

At present, ChargeIT budgets once per year and sets the budget for the next 12 months. A rolling budget process will result in a time horizon that, as we move through the budget year, always stretches 12 months ahead.

A rolling budget approach tends to be more accurate because it does not just extend the period of the existing budget; it also re-examines the nearest periods. It helps to reduce uncertainty and is vital when the environment is changing rapidly or, as in this case, where there is a lot of uncertainty surrounding a new product or market. As more attention is given to the nearest periods, this should reduce the uncertainty caused by a longer-range forecast and more accurately reflect the prevailing conditions. With a rolling approach, our budgets for sales and costs of the new product would therefore be more accurate, reflecting the latest expectations. As a result, budgets would be more realistic, achievable, and therefore more motivating.

A rolling budget process does not necessarily result in changes in budgets each month, but it does offer an opportunity for more frequent reviews. A rolling approach would offer additional opportunities to review the budget and ensure that ChargeIT both focuses on and considers the prospects further ahead. This approach will thus allow the business to react more quickly to changes in the environment than the current annual process allows.

Rolling budgets are particularly suited to planning cash flow, which needs to be reviewed regularly. It is not clear whether ChargeIT, as well as producing an annual cash budget, also does regular cash flow forecasting; however, it is important to focus on improved cash management. We currently have a high cash balance, and where the cash forecasts or budgets suggest that there will be a surplus, ChargeIT can arrange to reinvest these funds to make further gains. A rolling approach to cash flow budgets will also offer better visibility of cash flow and help to identify deficits. We can consequently either ensure appropriate financing arrangements are put in place to cover the shortage or adjust the timing of planned expenditure to avoid the cash flow shortage arising.

There are numerous benefits for ChargeIT in using rolling budgets, in particular, improving the accuracy of future cash flow budgets and better reflecting the changing environment and sales expectations. Rolling budgets, however, can be a significant amount of work. This additional work is involved in preparing, checking, and also in communicating the revised plans. In addition, there is limited benefit in planning too far ahead as accuracy may be questionable. It would be important to ensure that additional work is limited to where there are clear benefits, for example, potentially reviewing budgets quarterly rather than monthly. It may also be more appropriate to implement rolling budgets for only some budgets, such as the budgets for new products where there is more uncertainty.