PROFESSIONAL LEVEL

WEDNESDAY 8 JUNE 2022

2.5 HOURS

BUSINESS STRATEGY AND TECHNOLOGY

This exam consists of **three** questions (100 marks).

Marks breakdown

Question 1	40 marks
Question 2	35 marks
Question 3	25 marks

Important Information:

1. Please read the instructions carefully before you begin your exam.

Starting and ending the exam

2. Click on the **right arrow** in the header to begin the exam. The exam timer will begin to count down.

3. When the exam timer reaches zero, the exam will end. To end the exam earlier, navigate to the last question and click the right arrow button. Click the **Submit** button to close the exam.

Encountering issues during the exam

4. If you encounter any issues during the delivery of the exam you should alert the invigilator (or online chat support if you are sitting remotely). Neither the invigilator nor the online chat support can advise you on how to use the software.

Preparing your answers

5. Respond directly to the exam question requirements. Do not include any content of a personal nature, this includes your name or any other identifying content.

6. **Only your answer in the word processing area will be marked.** You must copy over any data for marking from the spreadsheet area to the word processing area.

7. The examiner will take account of the way in which your answers are structured. You must make sure your answers and workings are clearly visible in the word processing area when you submit your exam. The examiner will **not** be able to expand rows or columns where content is not visible.

After the exam

8. If you are sitting in an exam centre and believe that your performance has been affected by any issues which occurred during the exam, you must inform your invigilator at the time of occurrence and follow up with ICAEW directly after your exam. You will then need to submit a special consideration application to ICAEW if you wish us to

consider such issues, as per our published policy. If you are sitting remotely, please submit your special consideration application referring to anything of note which occurred and will have been recorded, for use as evidence to support your case.

9. A student survey is provided post-exam for feedback purposes.

Question 1

Assume that the date is 31 May 2022.

Akira Sato moved to the UK in 2003, having previously been a chef in Japan.

In 2004, Akira founded a company, Sushi Restaurant Japan Ltd (SRJ), of which he was CEO and initially the only director and owner of all its ordinary shares. SRJ opened a restaurant with Akira as head chef in London in 2005. It specialises in sushi, although it is also known for its wide range of Japanese cuisine.

Sushi is made of rice, accompanied by ingredients such as seaweed and small pieces of raw fish. While some sushi restaurants in the UK serve mass-produced sushi, SRJ serves very high-quality food which is freshly made by hand each day using fresh fish, meat and vegetables that are delivered daily by its suppliers.

It took five years for SRJ's first restaurant to become fully established with a reputation throughout London as an upmarket, high quality sushi restaurant. SRJ opened a second sushi restaurant in London in 2010, employing a head chef with a good reputation for Japanese cuisine.

From 2011 to 2021, SRJ opened one additional sushi restaurant in the London region (ie, within 40 kilometres of central London) at the beginning of each year. By December 2021, SRJ owned a chain of 13 sushi restaurants and its reputation for high quality food was becoming well-known throughout the UK. Revenue from visitors to the London region from elsewhere in the UK comprised an estimated 7% of SRJ's total revenue in 2021.

Sushi continues to be hand-made each day by skilled chefs in each of SRJ's 13 restaurants. Fresh ingredients are ordered centrally and delivered directly to individual restaurants by London-based, trusted suppliers.

All SRJ's restaurant properties are held on long leases of 10 to 25 years. SRJ pays monthly lease rentals which cover regular renewals of fixtures and fittings.

<u>Expansion – capacity and capability</u>

SRJ has not yet opened any new restaurants in 2022.

By 2022, Akira is still CEO, but he no longer acts as head chef in any one restaurant. Instead, once or twice a month, he visits each restaurant, without notice, to inspect its processes and meals. On these visits, he works alongside chefs in the kitchens and meets customers.

By 2022, Akira also personally still controls all aspects of business operations so is working long hours, seven days a week. Although SRJ has a senior management team comprising Akira and other directors, Akira exerts a dominating influence over all aspects of SRJ's corporate governance.

Akira wants to expand by opening more new restaurants in large provincial cities across England, up to 400 kilometres from London. Akira could continue to grow the business as previously, by opening additional restaurants owned directly by SRJ, but he realises that the speed of expansion using this method would be slow.

Franchising

Akira is considering the alternative of more rapid expansion by finding franchisees to open individual restaurants across England. SRJ's finance director, Charles Clore, has provided some financial data and proposed franchising terms (**Exhibit 1**).

Akira is unclear about how franchising can generate revenue for SRJ. He is also concerned about the risks of franchising, including how to ensure franchisees provide appropriate quality of food and service over the four-year term of their franchise contract.

Charles has provided additional data in relation to one potential franchisee, Quality Sushi & Sashimi Ltd (QSS). QSS operates a single restaurant in Manchester, 300 kilometres from London, providing mid-market Japanese-style cuisine. Charles believes QSS could become SRJ's first franchisee (**Exhibit 2**).

Providing marketing services for franchisees

Social media is an important element in the marketing strategy of SRJ's existing business and will be critical for promoting franchised restaurants. SRJ's marketing director, Tina Tanner, has provided some social media data and other information (**Exhibit 3**).

Operations director's concerns about franchising

Harrah Chisaka is SRJ's operations director. In 2010, when she joined the company, she invested in a new issue of SRJ ordinary shares and, as a result, she owns 5% of its ordinary share capital. Akira owns the remaining 95% of SRJ's ordinary share capital.

Harrah has several concerns about SRJ's franchising plan. Before joining SRJ, she owned and operated a sushi restaurant in Manchester. She believes that her business failed because, outside the London region, there is insufficient demand for high-quality, fresh sushi due to social, cultural and economic factors. Also, Harrah believes that the success of SRJ's restaurants is closely related to Akira's personality, reputation, culinary skills and personal involvement. These factors may not be fully replicated in SRJ franchised restaurants away from London.

Harrah is concerned that franchisees will find that, when operating outside London, they cannot reproduce the good financial performance of SRJ's existing restaurants in the London region. She also believes Akira knows that SRJ's existing business model cannot be successfully replicated by its franchisees outside the London region. As a result, she thinks that Akira is engaged in mis-selling to potential franchisees.

Requirements

1. Using the working assumptions for QSS in Exhibit 2 and the proposed franchising terms in Exhibit 1, calculate:

   - the expected average annual operating profit and the expected break-even average annual revenue **for QSS**, after all franchise costs; and

- the average annual operating profit expected **for SRJ** from the franchise with QSS. **(9 marks)**

2. Explain and compare the benefits and risks for SRJ of:

   - expanding by franchising new restaurants across England; and
   - continuing to grow by opening new restaurants owned directly by SRJ.

   Consider financial and non-financial factors. Provide supporting calculations, assuming that the proposed QSS franchise model will be typical of other future franchises. **(12 marks)**

3. Referring to the issues highlighted by Tina in Exhibit 3:

   (a) Analyse and explain the social media data that SRJ has captured for its owned restaurants. Explain how SRJ can use this data. Ignore the franchising plan.

   (b) Assuming franchised restaurants are opened, explain the factors to be considered in determining whether:

   - SRJ should control local social media advertising centrally; or
   - franchisees should be responsible for local advertising using social media. **(10 marks)**

4. Explain the ethical issues for Akira arising from Harrah's concerns. Set out the actions, if any, that Akira and Harrah should take. **(9 marks)**

Total: 40 marks

Exhibit 1: Financial data and proposed franchising terms – prepared by Charles Clore, finance director

SRJ summary statement of profit or loss for the year ended 31 December 2021

	Notes	**£000**
Revenue		18,720
Less costs:		
Ingredients and drinks	**(1)**	(5,616)
Other operating costs	**(2)**	(9,360)
General administration costs	**(3)**	(1,560)
Operating profit		2,184

Notes:

(1) 'Ingredients and drinks' include all purchases from suppliers for all items available on the SRJ menu.

(2) ‘Other operating costs’ are half fixed costs and half variable costs. They include staff costs, property rental costs, depreciation, utilities and other sundry operating costs for restaurants.

(3) ‘General administration costs’ are fixed and are incurred centrally.

Proposed franchise contract terms

- Franchise contracts will be for four years.

- SRJ will charge each franchisee:

  - an initial total fixed fee of £100,000 for the four-year period; and
  - an annual fee of 8% of the franchisee's gross annual revenue, before any costs.

- The franchisee must purchase all ingredients and drinks from SRJ at cost plus 20%, to maintain the consistency of SRJ menus across owned and franchised restaurants.

- SRJ and the franchisee will jointly select appropriate leased premises. Lease agreements will include restaurant properties, fixtures and fittings. Lease rentals will be paid monthly.

- The franchisee will operate using the SRJ brand name.

- SRJ will provide some advertising, training and operational support over the four-year period.

- After four years, the franchise contract can be renegotiated, but either party has the option to terminate the contract at this time.

- Penalties will apply if either party terminates the franchise contract before the end of the four-year term.

Exhibit 2: Potential franchisee, QSS – prepared by Charles Clore, finance director

The owner of QSS met Akira and Charles to discuss starting to operate its Manchester restaurant under a SRJ franchise. It is a mid-market Japanese restaurant, so the SRJ franchise would be part of QSS’s strategy to move upmarket.

For the purpose of evaluating the franchise contract between SRJ and QSS, both parties agreed the following working assumptions:

Working assumptions

- The proposed franchise contract terms (Exhibit 1) will apply.

- Over the full four years of the franchise contract, QSS meal prices will be the same, on average, as meal prices in SRJ’s owned restaurants in the year ended 31 December 2021.

- In each of the four years of the franchise contract, QSS will generate gross annual revenue of 90% of the annual revenue achieved by an average owned SRJ restaurant in the year ended 31 December 2021.

- The percentage contribution margin for QSS over the four-year contract will be the same, on average, as for SRJ's owned restaurants in the year ended 31 December 2021, **before** including any franchise costs paid to SRJ by QSS.

- There will be no central administration costs for QSS.

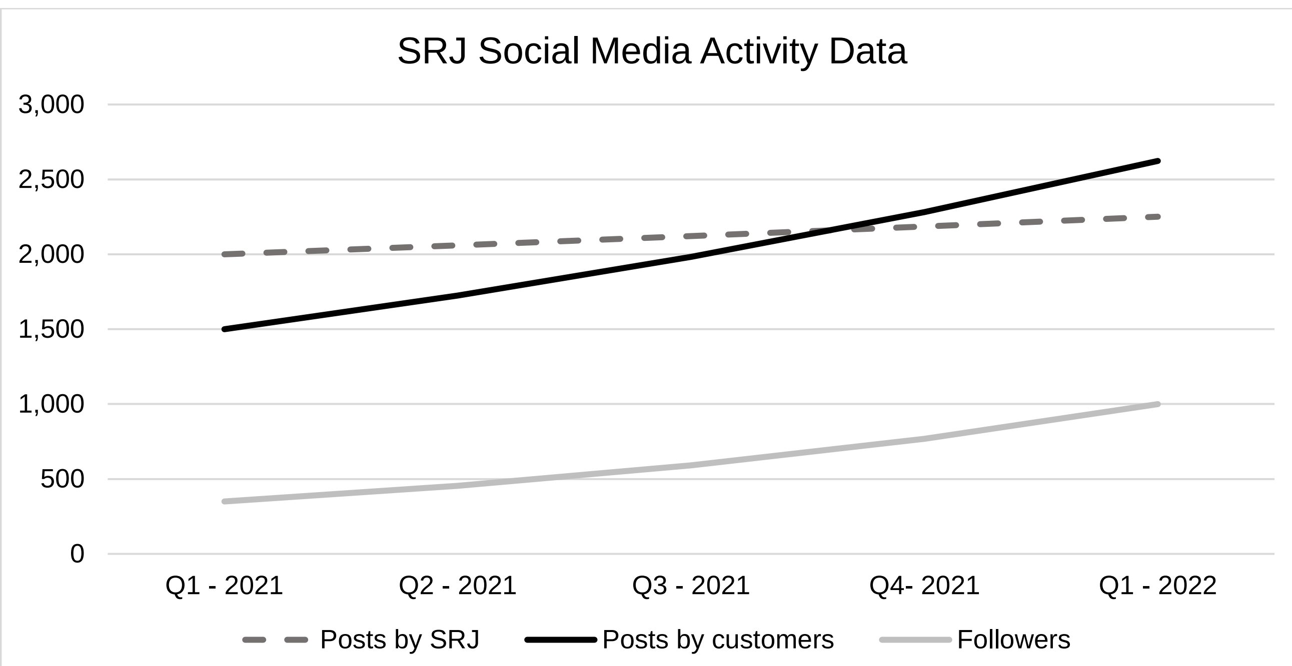
- The time value of money will be ignored.

Exhibit 3: Social media marketing – prepared by Tina Tanner, marketing director

Social media activity: posts and followers for SRJ's owned restaurants

To date, SRJ has made limited use of the social media data it collects. SRJ is active in using social media, but we need to understand the data we have captured.

I have produced the following visualisation of some aspects of social media activity for SRJ's existing owned restaurants for the last five quarters (ie, 15 months to 31 March 2022):



The visualisation shows, for each of the last five quarters: number of posts by SRJ; number of posts by SRJ's customers; number of followers.

The lines in the visualisation show trends in this quarterly data.

Social media activity: sentiment analysis for SRJ's owned restaurants

We capture key words used by SRJ’s customers in their posts about SRJ on social media.

While we conduct sentiment analysis on this data, we consider only the four most frequently used words about SRJ on social media.

For the three months to 31 March 2022 these were:

Word used	**Frequency of use**
Service	387
Sushi	194
Expensive	165
Rude	89

We are not sure whether some of these words are good or bad signals from customers.

Local advertising for franchised restaurants using social media

The SRJ board has agreed that, if we proceed with franchising, social media will be important in advertising franchised restaurants in their local areas. There are two alternative approaches:

(a) SRJ delivers and controls social media communications to advertise all restaurants, both owned and franchised, in their local areas. If this approach is adopted, the franchise contract will prevent franchisees from using social media to advertise themselves locally.

(b) The franchisees deliver local advertising using social media, without central input from SRJ.

The board agrees that national advertising and advertising for SRJ owned restaurants will be carried out by SRJ centrally.

Question 2

Assume that the date is 31 May 2022.

Kita Ltd (Kita) manufactures three types of air conditioning product at its factory in southern England. It sells to retailers operating in the UK, France and Italy.

Kita's selling price per unit, variable production cost per unit and fixed production overheads for each of the three air conditioning product types were as follows for the three months ended 31 May 2022:

Product code	Product type	Selling price per unit £	Variable production cost per unit £	Total fixed production overheads for three-month period £
Product 1	Elite	1,850	867	150,000
Product 2	Premium	1,200	778	120,000
Product 3	Basic	900	679	140,000

Production of all three product types takes place on the same production line.

Variable production costs are all directly identifiable with units of production.

The Kita management accounting system allocates fixed production overheads to each product type using activity-based costing.

The Elite product can be remotely operated from mobile phones, tablets or other internet-connected devices. The Elite was introduced in January 2022 and it is the first Kita product to have internet operability. The Kita board has a strategy to add internet operability to the other two product types over the next four years.

Kita has a geographical organisational structure for sales and marketing, operating in three regions (UK, France and Italy). Each region sells all three product types and has a regional manager who is responsible for the contribution achieved by the region. Performance of the three regions for the three months ended 31 May 2022 was as follows:

Region code	Region name	Revenue £	Total variable production cost £	Sales volume (units)
A	UK	724,700	466,901	633
B	France	775,600	529,624	723
C	Italy	308,750	172,237	218

The Kita management accounting system does not allocate fixed production overheads to the geographical regions.

All sales are invoiced to customers in £ sterling.

Board meeting – production director’s proposal for product development

At a recent board meeting the production director, Gary Gallas, made a proposal:

‘We need to update our products to grow the business. The Basic product (Product 3) has the highest sales volume, but it uses old technology. I believe that we should now update the technology of the Basic product to improve its temperature control. We would not introduce internet operability in this update.

‘In the three-month period following the update, compared with the three months to 31 May 2022, my working assumptions for the Basic product update are that:

- the variable production cost will increase by £60 per unit
- selling price will increase by 8% per unit
- total fixed production overheads will increase by £30,000
- there is uncertainty over sales volumes, but there is an equal probability that they will either:

  - remain at the same level as in the three months ended 31 May 2022; or
  - increase by 20% from that level.’

Data analysis for a board meeting

You are an assistant to the finance director. The board requires an analysis of relative performance for the three months ended 31 May 2022 for product types and for geographical regions.

The finance director has provided you with a **pre-populated spreadsheet** for the three months ended 31 May 2022 showing daily volumes of sales transactions (each row shows a day’s sales volume of one product type, in one region).

Requirement

Prepare a report for the board as follows:

1. Assimilate and analyse the data in the **pre-populated spreadsheet** for each product type for the three months ended 31 May 2022.

   Your answer should include a structured analysis of the data relating to sales volumes; revenue; total contribution; operating profit. You are **not** required to discuss your calculations. **(10 marks)**

2. For the three months ended 31 May 2022, explain:

   - the relative performance of the three product types.
   - the relative performance of the three geographical regions.

Refer to your analysis of data in Requirement 1. Ignore the production director’s proposal. **(15 marks)**

3. Using all the information provided, evaluate the production director’s proposal for updating the Basic product (Product 3). Include a risk analysis and supporting calculations using the working assumptions. **(10 marks)**

Total: 35 marks

Question 3

Assume that the date is 31 May 2022.

Zedes GmbH (Zedes) is a car manufacturer. Zedes cars are made at two large factories in Germany, one near Munich and the other near Berlin, but it is planning to begin production in Brazil as well. Zedes sells its cars internationally in many countries in Europe, Asia and North America.

Zedes makes high-performance sports cars at its Munich factory and large executive cars at its Berlin factory. Zedes has an excellent brand reputation for quality and reliability. The lowest priced Zedes car sells for €60,000, which is more than double the price of an average new car in most countries. Zedes sold 350,000 cars in 2021.

Zedes manufactures only petrol-powered cars in Germany but, following a successful research and development (R&D) project, it has designed a new small, electric-powered car which is called the Siesti. The Siesti will sell in the price band €35,000 to €45,000.

High wage rates made it difficult to establish a low-cost base for making the Siesti in Germany. The Zedes board therefore decided to acquire a car manufacturer in a lower cost region.

<u>Acquisition of Cortiz</u>

In March 2022, Zedes acquired a car manufacturing company, Cortiz, based in Brazil. Financial assistance was provided by the Brazilian government to incentivise the acquisition. Zedes plans to make the Siesti in Brazil only.

Cortiz has for many years made low-priced, small, diesel-powered cars, benefiting from low labour costs. It produces 80,000 cars per year, which are mainly sold in South America. The quality and reliability of its cars have been significantly below the standards expected by consumers in most of Zedes's international markets.

Cortiz has three factories spread throughout Brazil. It has a large workforce that is mainly semi-skilled, specialising in tasks involved in the manufacture of diesel-powered cars. Components for cars manufactured by Cortiz have historically been sourced from local Brazilian suppliers or manufactured internally at the Cortiz factories.

Cortiz was sold to Zedes by a large international conglomerate which operated a highly centralised organisational structure, with all major decisions taken at head office. Production was labour-intensive with low levels of investment in new technologies.

Following the acquisition by Zedes, Cortiz initially continued to make the same diesel-powered cars as it had under its previous ownership.

<u>Post-acquisition review</u>

The aim is for the Cortiz factories to manufacture 100,000 good quality, small, electric-powered Siesti cars per year, and sell them in international markets. It will cease manufacturing diesel-powered cars when production of the Siesti commences.

The Zedes board identified the following existing issues with Cortiz and set out the required actions:

- Excess labour – the 18,000 Brazilian employees must be reduced in number by 50%.
- Excess capacity – one of the Cortiz factories must close. All three existing factories are in Brazil, but they are over 1,000 kilometres apart.

The Zedes board has the following plans for Cortiz:

- Significant new investment will be made in new technology and modern manufacturing equipment in the two retained Brazilian factories.
- The two retained factories will make an identical model of the Siesti.
- About 75% of components by value for the Siesti cars will be sourced from Europe or China. The remainder will be sourced from within South America.
- There will be local autonomy of decision making, with some Zedes senior managers moving to Brazil from Germany.
- Cortiz will cease manufacturing components internally when production of the Siesti commences.

<u>Issues still to be resolved</u>

The Zedes board has identified the following issues that are still to be resolved for the Brazilian operations:

- How to measure the performance of operations in Brazil using benchmarking.
- Whether to have rapid implementation of change in one year or piecemeal implementation of change over three years.
- Whether to sell Siesti cars under the existing Cortiz brand, the Zedes brand or a new brand.

Requirements

Prepare briefing notes for the Zedes board which address the issues still to be resolved as follows:

1. Explain the types of benchmarks that Zedes should introduce to measure performance in Brazil and describe how they can be used to improve performance.

2. Explain the factors that should be considered by the Zedes board in choosing between rapid implementation of change and piecemeal implementation of change.

3. Provide reasoned advice on whether to sell Siesti cars under the Cortiz brand, the Zedes brand or a new brand.

Total: 25 marks