



# *PROFESSIONAL LEVEL*

WEDNESDAY 8 SEPTEMBER 2021

2.5 HOURS

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## *BUSINESS STRATEGY AND TECHNOLOGY*

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

### **Marks breakdown**

Question 1	45 marks
Question 2	32 marks
Question 3	23 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. A warning is given five minutes before the exam ends. 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. You may use a pen and paper for draft workings. Any information you write on paper will not be read or marked.
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. Only your answer in the word processing area will be marked. **You must copy over any data from the spreadsheet area to the word processing area for marking.** 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 the occurrence and follow up with ICAEW directly after your exam. If you wish us to consider such issues you will then need to submit a special consideration application to ICAEW, 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

Ordio Ltd (Ordio) is a global company which streams audio content to computers and mobile devices using the internet. Streaming allows users to listen in real time instead of downloading files and storing them.

Ordio was founded 10 years ago by Jacinta Or and Dio Ngeh, who are both music enthusiasts and technology experts.

### Background information

Ordio offers:

- a free service, where users can stream limited content with regular advertisements which generate revenue for Ordio, or
- a paid-for premium service, with better sound quality and unlimited content, uninterrupted by advertisements.

Ordio began as a music streaming service. Over 85% of its music is made available by three media companies that have contracts with a wide range of artists. Ordio obtains rights to stream music by paying royalties to the media companies. Since 2018, Ordio has also sourced its own content by contracting directly with artists and paying them royalties in the form of a share of the revenue generated.

### Competitive strategy

Ordio is the market leader in music streaming, with 193 million users at the end of 2019. It has two close rivals, with 60 million paying users and 55 million paying users respectively. Ordio is the only competitor to offer a free streaming service, supported by advertising. Ordio's service is also compatible with a wider range of mobile devices, including wearables such as smartwatches, than most of its competitors.

Ordio's user engagement strategy is based on recommended playlists (themed lists of music by different artists which are put together by music editors, employed by Ordio). Ordio has links with all major social media sites so users can share playlists and songs with friends. While competitors' playlists are based around certain types or decades of music, Ordio's music editors create playlists to fit in with events, activities or moods. The editors promote new artists by integrating their music into these playlists.

Ordio collects data on artists and users, then uses data analytics to generate personalised playlists and customised suggestions for premium users only, based on their personal profile and listening history.

Financially, Ordio is very reliant on its premium users. Its strategy is to attract free users initially and then to persuade them to convert to the premium service due to its differentiated features. 60% of premium users initially join as free users.

### Structure and culture

Jacinta and Dio each own 30% of Ordio's ordinary share capital. The remainder of the shares are held by GTC, a global telecoms company which has a strategic partnership with Ordio. New GTC customers are offered a 3-month free trial of Ordio's premium service.

They can link their Ordio and GTC accounts, so Ordio playlists are available across all GTC-linked hardware, including smart TVs.

Ordio's founders retain a significant interest in the operations of the business and manage key relationships with media companies and artists. Ordio operates with an informal structure to minimise bureaucracy, and music editors are given significant autonomy. Most IT is provided in-house but many support functions, including payroll, accounting and human resources (HR), are outsourced.

### **New podcast strategy**

Until 2019, Ordio was loss-making. It invested heavily in digital technology, artificial intelligence (AI) and data analytics, to target growth and market share rather than short-term profitability. Growth is key as a large, growing user base makes Ordio more attractive to media companies, artists and advertisers, which increases Ordio's bargaining power.

At the end of 2019 Ordio's founders identified that the market for music streaming was maturing. As a result, they set out a new vision for Ordio to be the world's leading audio platform, streaming spoken content ('podcasts') as well as music. Ordio's founders believed that providing non-music content would attract more users.

At the start of 2020, Ordio acquired two companies that produce podcasts. Ordio invested significantly in marketing and sourced additional content for its podcast playlists. Some streaming platforms specialise in podcast delivery only and many of Ordio's music streaming rivals also stream podcasts. However, Ordio's rivals require users to pay for podcasts separately whereas all Ordio users (free and premium) can automatically stream both music and podcasts.

Ordio believes that providing greater value for users should help it to defend its market share by increasing the number of free users who convert to the premium service. It should also help to retain premium users for longer and, eventually, allow Ordio to increase prices. Ordio therefore budgeted to achieve breakeven in the year ended 31 December 2020.

You work in Ordio's finance function, which operates as a business partner (BP) within the organisation. Jacinta and Dio have asked you to evaluate the success of the podcast strategy. Relevant financial and operating information, including quarterly data, is set out in **Exhibits 1 and 2**.

### **Strategic developments**

The finance function has also been asked to consider two strategic developments:

#### Ordio Youth

Ordio plans to launch a new service called Ordio Youth for children aged 9-13. Editors have selected a range of content (songs and stories) considered appropriate for users to engage with, and be educated by, without adult supervision.

#### Kovar

Kovar is an e-sports company that hosts competitive video games played by professional gamers. It is most famous for the Kovar Challenge (KC). Each year Kovar holds

championships worldwide that are attended by fans, streamed live and broadcast on video channels. Kovar has approached Ordio to be the audio provider for its global e-sporting events. Ordio's hub for KC would have music, podcasts and other content of interest to e-sports fans. This is a significant development for Ordio as it has not previously streamed live events.

## Requirements

1. Analyse Ordio's organisational structure and assess the extent to which it supports innovation and competitive advantage. **(9 marks)**
2. Using the data in Exhibits 1 and 2, and the other information provided, evaluate Ordio's performance in the year ended 31 December 2020 and the impact of the new podcast strategy. **(20 marks)**
3. Explain the benefits and risks of launching Ordio Youth. **(8 marks)**
4. Explain how the finance function as a business partner (BP) can assist Ordio in relation to the proposed strategic partnership with Kovar. **(8 marks)**

**Total: 45 marks**

### Exhibit 1: Financial and operating information for Ordio

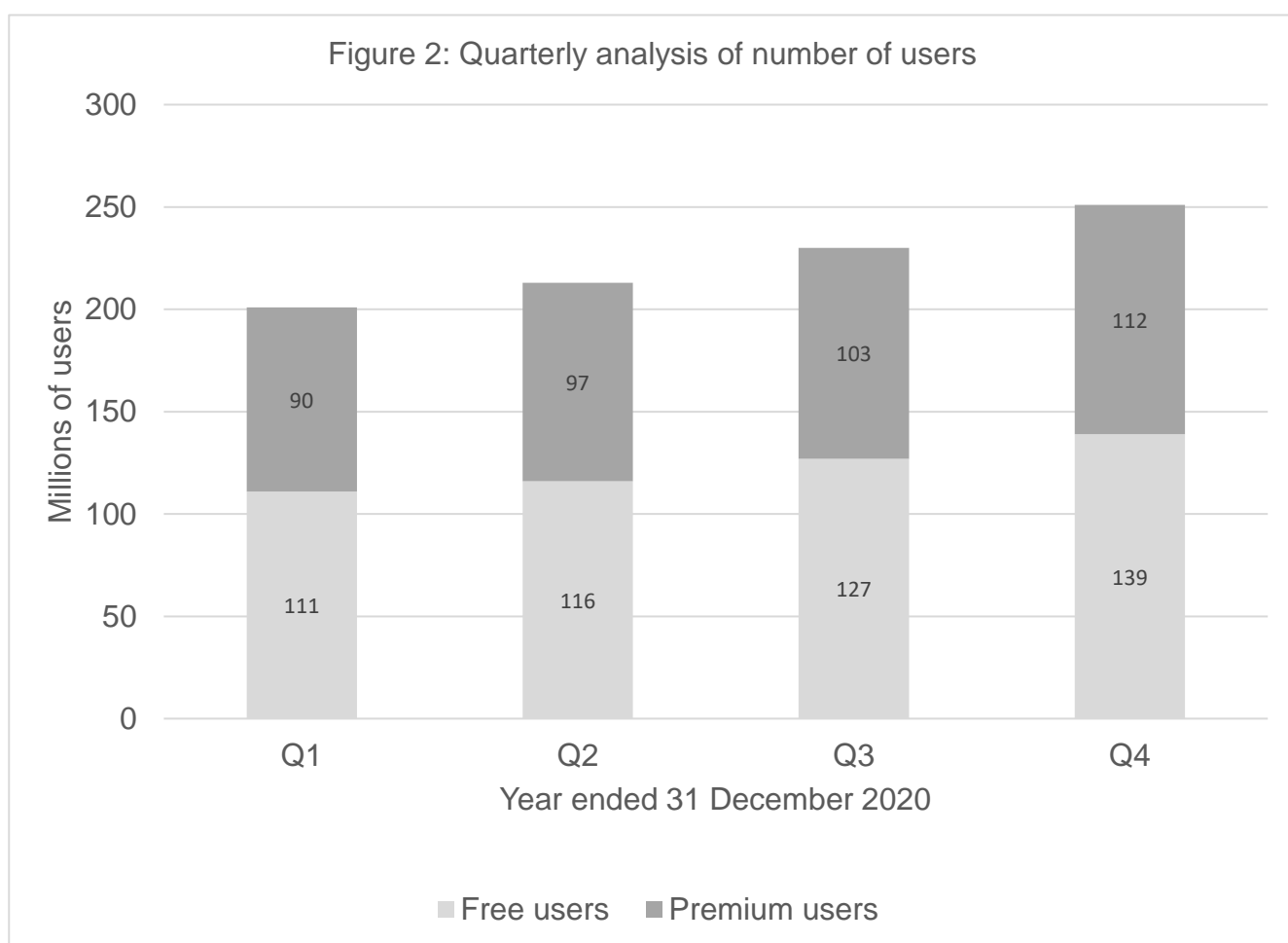
	Year ended 31 December		
	2020 Budget	2020 Actual	2019 Actual
	£million	£million	£million
<b>Revenue</b>			
Advertising on free service	550	560	490
Premium service	5,500	5,465	4,245
<b>Total revenue</b>	<b>6,050</b>	<b>6,025</b>	<b>4,735</b>
<b>Gross profit (note)</b>			
Advertising on free service	100	57	88
Premium service	1,450	1,393	1,148
<b>Total gross profit</b>	<b>1,550</b>	<b>1,450</b>	<b>1,236</b>
<b>Overheads</b>	(1,550)	(1,630)	(1,216)
<b>Operating profit/(loss)</b>	<b>0</b>	<b>(180)</b>	<b>20</b>
Gross profit margin	25.6%	24.1%	26.1%
Operating profit margin	-	(3.0)%	0.4%
Number of free users	135 million	139 million	107 million
Number of premium users	110 million	112 million	86 million
Number of podcasts available at end of year	700,000	630,000	0

**Note:** Gross profit is after charging royalties and streaming delivery costs for music and podcasts

**Exhibit 2: Actual quarterly data for year ended 31 December 2020**

Figure 1: Operating data

	<b>Actual 2020</b>			
	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>
Total number of users at end of quarter (see Figure 2) (millions)	201	213	230	251
% of premium users inactive in period	10%	7%	6%	5%
Churn rate (% of premium users cancelling in period)	5.3%	5.1%	4.9%	4.8%
Number of podcasts available at end of quarter ('000s)	166	293	450	630
% all active users engaging with podcasts	5%	9%	13%	16%



## Question 2

Bevattna Ltd (Bevattna) is a bottled water company, operating in the far north of Europe, that sells premium-quality still water. It owns an exclusive licence to source water from an underground spring which is regularly replenished by ice and snow melting from a large glacier. The water is naturally filtered by volcanic rocks and is low in harmful minerals. It is packaged at Bevattna's bottling facility and exported to markets in Europe.

### **Bottled water market**

Bottled water is drinking water that is packaged in plastic and glass bottles, metal cans and paper cartons. The majority is sold in plastic bottles for convenience although environmental concerns mean demand for alternative forms of packaging is increasing.

In some countries bottled water is seen as healthier than tap water, which may be chemically treated or contaminated. As the global population grows, demand for bottled water continues to increase.

The global market is expected to grow by 7.5% pa to 2025, with demand in Europe increasing by 4% pa over the same period. Bottled water sales continue to benefit from society's reduced consumption of carbonated soft drinks because of concerns about obesity. These concerns have also led some governments to introduce an additional tax on sugary beverages.

The European market for bottled water is well-established and competition is intense. It is segmented based on four types of water: still, sparkling, flavoured and functional. Functional water contains added vitamins or electrolytes for sports or health benefits. The market is dominated by three global players that sell several brands at various positions in the market and regularly introduce new products. A wide range of small local or regional businesses focus on niche markets. Consumers tend to be loyal to two or three different brands.

### **Bevattna's product portfolio**

Bevattna launched ten years ago with a single product, BePure, marketed as premium still glacier water. BePure is packaged in distinctive 1,000ml glass bottles bearing Bevattna's logo and is sold to upmarket retailers for onward sale to consumers.

In 2015, Bevattna launched BeFlav – still glacier water enhanced with natural fruit flavours, packaged in 500ml glass bottles. Aimed at millennials (aged 25-40) with high disposable incomes, BeFlav is positioned as a luxury alternative to carbonated soft drinks.

BeVee, still glacier water with added vitamins, was launched in 2019 and is marketed as a health product (functional water). It is packaged in resealable 330ml cans, made from 70% recycled aluminium. BeVee is sold to upmarket retailers and is also available for sale in minibars in upmarket hotels, and at luxury spas and high-end sports events. As consumers increasingly reject plastic packaging, the market for canned water is expected to grow rapidly. Since few bottled water companies currently produce premium-quality drinks in cans, BeVee has quickly established itself as the market-leading brand of luxury canned functional water.

**Exhibits 1 and 2** contain data for 2020 on the European bottled water market and Bevattna's product portfolio.

## **Ethics and natural capital**

Bevattna's water and its operations have been certified as carbon neutral. However, Bevattna has recently been accused of draining natural water supplies and selling them at a profit. Critics on social media have questioned Bevattna's right to purchase and use natural resources that should be for the public benefit. The environmental costs of production and consumption have also been questioned (see extracts from a recent social media feed in **Exhibit 3**).

## **Diversification strategy**

Bevattna's board is concerned about the sustainability of the bottled water market as environmentally-aware consumers switch to refillable bottles or purchase refrigerators with water dispensers.

As a result, it is considering selling spring water from the glacier, in bulk, to companies producing luxury skincare products. Bevattna is in discussions with FaceUp, a company which believes the purity of glacier water would enhance the perceived effectiveness of its products and attract premium prices. Bevattna would invest in innovative processing and storage technology to pipe spring water from the glacier into purpose-built, re-usable 24,000 litre tanks. These would be loaded into shipping containers for worldwide distribution to FaceUp and other customers.

An added benefit of investing in this technology is that Bevattna could enhance its corporate social responsibility by making bulk shipments of water to areas affected by natural disasters, such as earthquakes or droughts, when an emergency arises.

## **Requirements**

Prepare a report for Bevattna's board which analyses the company's current strategic position and makes recommendations for its future direction.

Use the following headings:

1. Bevattna's competitive strategy and existing product portfolio
2. Sustainability of the bottled water industry
3. Commercial and ethical implications of Bevattna's proposed diversification strategy.

Refer to data in the Exhibits and show supporting calculations and analysis.

**Total: 32 marks**

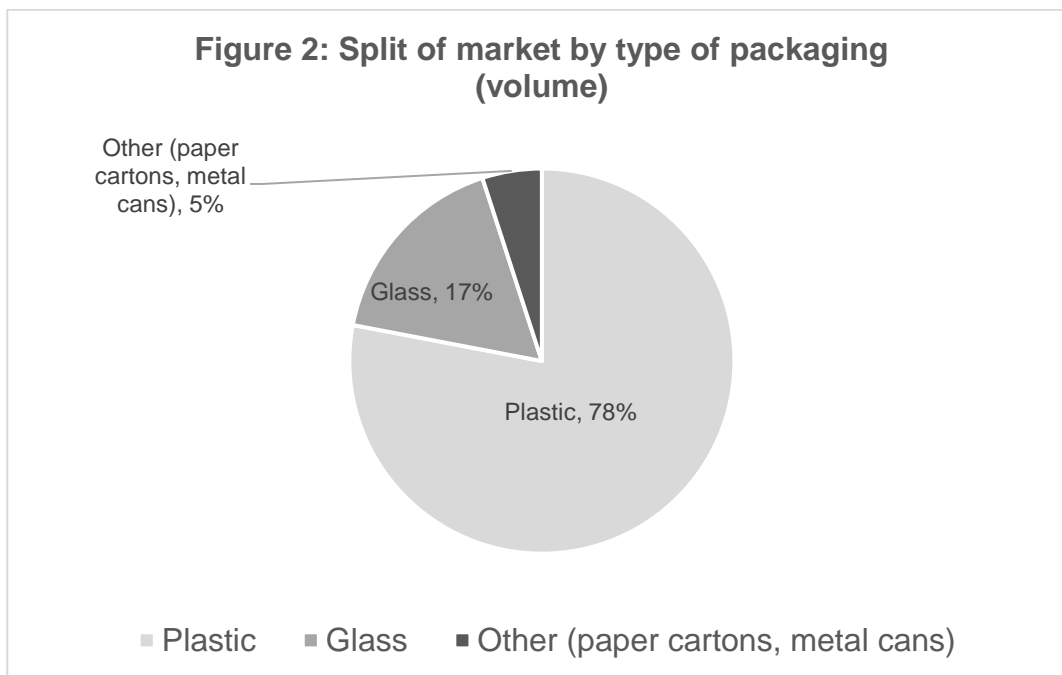


## Exhibit 1: Data on the European bottled water market in 2020

Figure 1: Market data by product type

Product type	Market growth rate 2019-2020	Split of market (by sales volumes)	Average market price per litre Euro €	Market price range Euro €
Still water	3%	60%	0.60	0.30 – 4.00
Sparkling water	5%	20%	1.00	0.50 – 5.00
Flavoured water	11%	13%	1.50	0.70 – 6.00
Functional water	16%	7%	2.30	0.90 – 8.00

Figure 2: Split of market by type of packaging (volume)



## Exhibit 2: Product portfolio in 2020

Bevattna			Largest competitor's equivalent product
Product	Average selling price per litre	Sales revenue	Sales revenue
	Euro €	Euro €	Euro €
BePure	3.00	325 million	680 million
BeFlav	3.50	181 million	950 million
BeVee	4.00	119 million	35 million

## Exhibit 3: Recent social media feed

<b>@Bevattna</b>
Post:



Stay hydrated with Bevattna's carbon-neutral glacier water – the secret to good living

Replying:

**@BackTap** It's sad how companies like Bevattna steal our water, bottle it and sell it back to us. Bottled water is 1,000 times more carbon intensive than the tap water alternative because of packaging and transport. #environment

**@MLK** Well said. The bottled water industry has wasted millions on marketing to convince us that the only place you can get safe water is from a bottle. #marketinglies

**@RTC** I disagree. In many parts of the world bottled water is vital as it's not safe to drink tap water due to unreliable municipal systems, contamination or disease. #taintedH2O

### Question 3

Kehti Corp Ltd (Kehti) is a business in India which sells seeds, fertilisers and pesticides to farmers. Kehti has strategic partnerships with a range of suppliers and distributors. Its reporting currency is US\$. In the year ended 31 December 2020 Kheti's revenue was \$89 million with a 25% gross profit margin.

More than 40% of India's labour force works in agriculture. Many farmers are smallholders who farm less than two hectares each, using traditional techniques. Water is scarce and crops are often damaged by unforeseen weather events and pests. As a result, the average crop yields for Indian farmers are 40% lower than the best attainable global yields. Climate change has caused heatwaves, droughts and unpredictable rainfall resulting in crop losses that reduce farmers' incomes and increase food prices.

To help address the problems caused by climate change, Kehti has developed a smartphone app. A farmer who downloads the Kehti app will input information about the size of their farm, typical crops, and their sowing and harvesting cycles. The app will use scientific data, machine learning and data analytics to help the farmer make informed decisions on what crops to plant, when to sow seeds, and how and when to irrigate. Use of the app is expected to increase yields for farmers by up to 20%.

Kehti's app will offer the farmer:

- Soil analysis – a farmer can purchase a soil-condition sensor which, via the internet of things, identifies the health of the farm's soil. The app then recommends appropriate crops using seeds and fertilisers that can be purchased from Kehti.
- Weather alerts - an algorithm integrates available weather data so the app can provide weather updates and suggest the right time to sow seeds, irrigate and harvest crops.
- Crop monitoring and treatment – the farmer uploads photos which artificial intelligence (AI) uses to identify problems with a crop's health. The app then recommends appropriate Kehti products, sends alerts of local pest infestations and advises farmers when to spray crops.

'We aim to become the farmer's trusted advisor,' said Kehti's head of operations. 'India is experiencing rapid digitisation, although smartphone ownership rates vary by region and sector. National investment in infrastructure and services is helping to provide high-speed connectivity. Our app builds on this investment to bring solutions to smaller farmers that they could not access individually.'

### Market research

Many farmers have very low incomes, so Kehti has not yet decided whether to charge an annual fee for use of the app. However, the app will be linked to Kehti's e-commerce platform which is expected to generate extra in-app sales of Kehti's products. Kehti may also earn revenue by sharing information from the app with seed producers and manufacturers of fertilisers and pesticides.

Kehti's marketing manager believes Kehti will face some challenges in implementing the app and persuading farmers to join and use it.

Three potential target markets have been identified:

- Smallholders
- Owners of medium-sized farms who are typically more technologically able and use more sophisticated farming techniques
- A national farming co-operative which would promote the Kehti app to its membership of small and medium-sized farms.

The marketing manager has received the results of initial market research, based on a sample of farmers from each target market:

Target market	Number of farmers (million)	% of farmers owning a smartphone	Proposed annual fee for use of app	% of farmers with smartphones likely to download app	Expected annual in-app sales per farmer
Smallholders	120	35%	Free	10%	\$2.50
Medium-sized farms	35	60%	\$1	5%	\$5.00
Members of farming co-operative	55	40%	Free	12%	\$3.50

### Requirements

1. Calculate, for each target market, the expected number of users and the annual revenue and gross profit from the Kehti app. Comment briefly on your results. **(6 marks)**
2. Identify and explain the barriers to implementation of the Kehti app strategy, for both Kehti and the farmers. **(8 marks)**
3. Suggest an appropriate marketing strategy for the Kehti app. **(9 marks)**

**Total: 23 marks**