Success of new product line

In early September 2005, Sally Higgins, a Zubinos area manager, introduced a range of low calorie snacks and meals in one of the shops in which she manages. This initiative had caused quite a disagreement between Sally Higgins and Jane Thorp, who had not been consulted regarding the new food and drink items, which Sally Higgins had procured from a small local supplier.

By October 2005, it was clear that the new low calorie product line was very popular and accounted for 8% of the turnover for September 2005 in the one shop in which it was introduced. After some discussion, Luis Zubino and Jane Thorp agreed that the low calorie product line appealed to Zubinos customers and to offer this new low calorie food range in all Zubinos coffee shops. Maria Todd was requested to organise central procurement for all the low calorie food and drink products. Jane Thorp recommended that a suitable marketing strategy for the low calorie foods would be to have a range of takeaway calorie-controlled meal boxes, under the brand name of "Zubinos Light" retailing at £3·00 each.

The first "Zubinos Light" meal boxes were available in all eighteen Zubinos coffee shops during November 2005 and immediately became popular. Furthermore, some limited market research of the customers who bought the "Zubinos Light" meal boxes established that over 95% of these customers were new Zubinos customers. Jane Thorp was delighted that this new product was also bringing new customers into Zubinos.

In January 2006, a major advertising campaign, using radio and posters, was commenced, and was due to run to the end of June 2006 at a total cost of £425,000. By the end of February 2006, Zubinos found that it had become the victim of its own success. All eighteen shops were almost always sold out of the "Zubinos Light" meal boxes and Maria Todd had been having numerous procurement problems. The original supplier, ART, was unable to increase the quantity beyond its contract level of 2,000 boxes a day. A new supplier, BBK, was introduced in late January 2006, despite Maria Todd's concern over quality. By the end of April 2006, it was estimated that over 5,000 boxes per day were in demand and Zubinos was again almost always sold out. (Note: it should be assumed that there are only 20 days per month for which "Zubinos Light" meal boxes will have this level of demand, to coincide with normal working patterns).

A further two suppliers are being considered, CCV and DTY. The results from the initial inspections by Maria Todd and Zubinos' food agency, and the cost per box quotes, are shown below, compared to existing suppliers:

Supplier	*ART*	*BBK*	*CCV*	*DTY*
Food quality	Excellent	Below expectations	Below expectations	Excellent
Cleanliness of food preparation areas	Excellent	Below expectations	Very good	Excellent
Cost per meal box	£1·20	£1·60	£1·10	£2·00
Maximum daily capacity	2,000	2,000	5,000	8,000
Initial contract period	12 months	6 months	6 months	3 months

Supplier CCV would be only able to supply meal boxes to Zubinos in one geographic area of the UK, whereas DTY has a supply chain established for nationwide delivery. Maria Todd has not identified any other suppliers at this time and needs to urgently select a further supplier for the *"*Zubinos Light*"* meal boxes.

Luis Zubino's planned three month absence

Luis Zubino informed his fellow directors at the end of April 2006 that he is planning to take a three-month break from the business, following his recent split from his wife, whom he married four years ago. Luis Zubino's absence from the business is planned for June, July and August 2006.

Luis Zubino was clearly upset with the break-up of his marriage, which he felt was partly due to the very long hours that he has spent building up the Zubinos business. Luis Zubino discussed with George Shale his concern, that if his marriage is not reconciled, his ex-wife could demand a payment potentially amounting to several million pounds, if they were to get divorced. Any divorce settlement is likely to be sometime within the next two years.

Management Information

George Shale and Bob West are continually frustrated by the lack of management information in a usable format. Over the past two years a few new IT systems have been introduced but there are several inconsistencies between the systems. The monthly management accounts are prepared using financial data for each shop, but there is little statistical information on customers, such as repeat customers and customer profile. Also the analysis between main product types (coffees, food, ice creams, *"*Zubinos Light*"* meal boxes) cannot easily be obtained. George Shale recruited two accountants, on six-month contracts, at the end of March 2006 to analyse information on a weekly basis, so that trends in customer spending can be tracked.

Bob West has discussed with Luis Zubino several times the introduction of a data based management information system that would capture all of the required information at source. However, the proposed cost of the database is over £800,000 and Luis Zubino considers that the cost could escalate to over £1,000,000 and he is adamant that the administration systems, although basic, can manage at present.

Staff issues and extended opening hours

Due to the rapid expansion and the popularity of Zubinos, many of the staff have been working very hard and working long hours and they report that they feel under too much pressure. Furthermore, due to the popularity of Zubinos, it was decided to extend the opening hours, into the evening and instead of closing at 7pm, they are now open until 11pm each night, seven days a week. Many of Zubinos staff have complained about later working and this has resulted in some employees leaving the company, despite Zubinos pay being a little higher than the market rate.

Over the last few months, Zubinos has employed many European Union (EU) immigrants on temporary short-term contracts. Zubinos is paying below the market rate in this industry for these employees, but slightly above the legal minimum wage rate. The cost of these employees is approximately 12% below other Zubinos staff. The EU immigrants are also prepared to work long hours. The EU immigrant workers have accepted the shift patterns given to them, which often involve early morning shifts to accept deliveries from 5 o'clock in the morning. While these employees are given time off during the day, they are often scheduled to work a further shift later in the day, right up to closing time. Some of the EU immigrant employees choose to work straight through from early morning to closing time with very few breaks. These employees speak English poorly and offer poor customer service. Many Zubinos coffee shop managers have now noticed that the level of customer complaints has increased.

TURN OVER

There have been several complaints and some adverse press coverage concerning disturbances to neighbours and people whose flats are above Zubinos coffee shops because of Zubinos' later closing time at night. However, the rental agreements for the rented shops allow this late closing time. Another factor that has caused problems to Zubinos' neighbours is the deliveries from its food suppliers between 5 and 6 o'clock in the morning to Zubinos coffee shops in some city centres. The parking of large delivery vehicles and the noise caused by unloading has led to several complaints, including a pending legal action for noise nuisance.

New Zubinos coffee shops in 2006

Luis Zubino wanted to open the planned eight new coffee shops in 2006, partly financed from the approved £5·0 million loan finance that KPE has made available to Zubinos. During January to May 2006, there have only been two new coffee shops opened. There are plans already in place for a further two openings later this year. The number of new Zubinos coffee shops has fallen behind schedule, as Luis Zubino, who plays a crucial role in the site selection process, has not pursued the expansion programme, as he usually would have done, due to his personal problems with his marriage breakdown.

Bob West is now trying to secure rental agreements on a further four shops. He has been unable to find suitable rental sites for two of them. He has drafted a proposal for the June 2006 Zubinos Board meeting, requesting approval to purchase two retail premises at a total cost of £2·2 million for both sites.

The capital cost and shop fitting costs are also forecast to exceed the current planned capital expenditure budget during 2006, due to two reasons:

- All four of the new coffee shops that have been opened or are currently being prepared for opening, are in larger premises, with higher fittings costs;

- The latest, more expensive, refrigerated display units have been ordered for the new Zubinos shop openings in 2006, which are far superior to those in other Zubinos shops.

The average capital expenditure for each new Zubinos coffee shop in 2006 is now forecast to be £330,000, compared to an average of £250,000 in 2005.

The latest forecast for 2006, prepared at the end of April 2006, assumes a total of only 6 new shops opening during 2006. The forecast cash which will be generated from operations for 2006 is £2·2 million. This will be used to partially fund the planned capital expenditure which is currently forecast for 2006 to be £4·7 million (and this capital expenditure forecast assumes the purchase of the two retail premises, as detailed above).

Operating costs

In an attempt to reduce operating costs, Maria Todd has chosen to change a few suppliers who are providing high cost food items, and has managed to procure very similar food items at a lower cost. She has also chosen to procure a higher proportion of coffee from UK wholesalers, which has resulted in large cost savings.

The cost savings have been achieved due to two reasons. Firstly, the coffee beans are purchased from UK wholesalers who bulk buy and the cost per kilogram is lower than the Fair Trade coffee that Zubinos had previously purchased. Most of these new coffee purchases are not Fair Trade coffee. Secondly, Zubinos pays for these new coffee purchases in UK sterling and is not exposed to any risk of currency movements.

Zubinos is now considering whether its marketing literature should be changed to reflect that only 60% of its coffee purchases is now Fair Trade coffee, whereas previously it was over 80% Fair Trade.

Franchising proposal

An international franchising company, GlobalFranch (GF) has approached Luis Zubino at the end of April 2006 with a proposal to assist Zubinos to expand via franchising. The proposal was presented to the Zubinos Board in May 2006, and Luis Zubino's initial response is favourable.

GF has stated that it has over thirty franchisees ready to open franchised outlets and it considers that the Zubinos business could be a very successful franchised business. GF has also stated that it is considering offering its franchise service to two other coffee shop chains, which are based in Europe, but has decided to allow Zubinos to have first refusal. GF has therefore stated that it needs a final decision by the end of June 2006.

GF's proposal is to franchise out the Zubinos coffee shop brand and expand both in the UK and overseas, particularly in the rapidly growing Far Eastern market. GF would like to offer its services and its experience to recruit and manage franchisees, which would then operate franchised Zubinos coffee shops in the UK, Europe and the Far East. GF insists on a minimum contract period of 5 years, with a one-year notice period. GF also stipulates that in order to allow the franchisees to build up their business, Zubinos should limit the number of its coffee shops which it operates to no more than 40% of the planned franchised coffee shops by the end of 2009.

The financial forecast shown below is based on the following number of franchised shops:

Number of forecast franchised shops	*2007*	*2008*	*2009*	*2010*	*2011*
New openings in year	20	30	50	80	120
Cumulative franchised shops	20	50	100	180	300

The proposal is that for each new franchised shop, Zubinos would receive 9% of the gross sales revenue. Zubinos would also supply all of its regular coffees and own brand product lines to franchised shops at agreed prices, which would include a mark up of around 6% on cost.

GF has stated that its fees for locating franchisees and managing the franchising business for Zubinos would be a fee of £20,000 for each new shop opened plus a fee of 6% of the franchised revenue for the first year of each shop opening. After the first year of each shop opening GF would charge a flat fee of 2% of the franchised revenue for the contract period. GF has prepared the following forecast cash flows (pre-tax) for the next 5 years:

Franchise income payable to Zubinos:	*2007 £million*	*2008 £million*	*2009 £million*	*2010 £million*	*2011 £million*
Revenue	0·9	3·5	8·2	16·9	31·9
Mark up on supplies to franchisees	0·2	0·7	1·5	2·7	4·4
Total Franchise income	1·1	4·2	9·7	19·6	36·3
Franchise fees payable by Zubinos to GF:					
£20,000 for each new shop	0·4	0·6	1·0	1·6	2·4
6% of revenue for first year	0·6	1·6	2·8	5·0	8·5
2% of total franchised revenue	0·0	0·2	0·9	2·1	4·3
Total franchise fees payable	1·0	2·4	4·7	8·7	15·2

TURN OVER

Zubinos exclusive coffee machines

Jane Thorp launched a new product line in November 2004, selling exclusive coffee machines to customers for their homes or offices. These are sold on Zubinos website and also in Zubinos coffee shops. Until the summer of 2005, they were not well-marketed, but following a promotional campaign, the coffee machines have sold particularly well, and customers have repeatedly bought further coffee supplies from Zubinos.

The coffee machines have been procured from a leading coffee machine manufacturer on an exclusive contract for Zubinos. The coffee machines use specially designed sachets of coffee that can only be bought from Zubinos coffee shops, or available from Zubinos website. The unique selling point is that customers can enjoy their favourite type of Zubinos cup of coffee in the comfort of their own homes. The projected cash flows for the next three years for the sale of the coffee machines and coffee supplies are as follows:

	2006	*2007*	*2008*
	£million	*£million*	*£million*
Sales - Coffee machines	1·1	1·3	1·7
- Coffee supplies	1·1	2·9	7·1
Costs - Coffee machines	1·2	1·4	1·9
- Coffee supplies	0·2	0·6	1·4

There have been a significant number of dissatisfied customers who have returned faulty machines over the last few months. Originally, as a gesture of goodwill, Jane Thorp had instructed all shop managers to give customers with faulty machines, a free replacement machine and free samples of coffee sachets. However, the number of faulty machines has increased in March and April 2006. The manufacturer has examined a number of returned machines, and has identified a design fault. All new manufactured coffee machines from May 2005 will have this fault corrected.

Appointment of a consultant

At the Zubinos Board meeting in the middle of May 2006, it was agreed that a consultant would be appointed to advise the Board on the issues facing Zubinos.

End of Unseen material

Maths Tables and Formulae are on pages 25 to 28

MATHS TABLES AND FORMULAE

Present value table

Present value of 1.00 unit of currency, that is $(1 + r)^{-n}$ where r = interest rate; n = number of periods until payment or receipt.

Periods	Interest rates (r)									
(n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909
2	0.980	0.961	0.943	0.925	0.907	0.890	0.873	0.857	0.842	0.826
3	0.971	0.942	0.915	0.889	0.864	0.840	0.816	0.794	0.772	0.751
4	0.961	0.924	0.888	0.855	0.823	0.792	0.763	0.735	0.708	0.683
5	0.951	0.906	0.863	0.822	0.784	0.747	0.713	0.681	0.650	0.621
6	0.942	0.888	0.837	0.790	0.746	0705	0.666	0.630	0.596	0.564
7	0.933	0.871	0.813	0.760	0.711	0.665	0.623	0.583	0.547	0.513
8	0.923	0.853	0.789	0.731	0.677	0.627	0.582	0.540	0.502	0.467
9	0.914	0.837	0.766	0.703	0.645	0.592	0.544	0.500	0.460	0.424
10	0.905	0.820	0.744	0.676	0.614	0.558	0.508	0.463	0.422	0.386
11	0.896	0.804	0.722	0.650	0.585	0.527	0.475	0.429	0.388	0.350
12	0.887	0.788	0.701	0.625	0.557	0.497	0.444	0.397	0.356	0.319
13	0.879	0.773	0.681	0.601	0.530	0.469	0.415	0.368	0.326	0.290
14	0.870	0.758	0.661	0.577	0.505	0.442	0.388	0.340	0.299	0.263
15	0.861	0.743	0.642	0.555	0.481	0.417	0.362	0.315	0.275	0.239
16	0.853	0.728	0.623	0.534	0.458	0.394	0.339	0.292	0.252	0.218
17	0.844	0.714	0.605	0.513	0.436	0.371	0.317	0.270	0.231	0.198
18	0.836	0.700	0.587	0.494	0.416	0.350	0.296	0.250	0.212	0.180
19	0.828	0.686	0.570	0.475	0.396	0.331	0.277	0.232	0.194	0.164
20	0.820	0.673	0.554	0.456	0.377	0.312	0.258	0.215	0.178	0.149

Periods	Interest rates (r)									
(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2	0.812	0.797	0.783	0.769	0.756	0.743	0.731	0.718	0.706	0.694
3	0.731	0.712	0.693	0.675	0.658	0.641	0.624	0.609	0.593	0.579
4	0.659	0.636	0.613	0.592	0.572	0.552	0.534	0.516	0.499	0.482
5	0.593	0.567	0.543	0.519	0.497	0.476	0.456	0.437	0.419	0.402
6	0.535	0.507	0.480	0.456	0.432	0.410	0.390	0.370	0.352	0.335
7	0.482	0.452	0.425	0.400	0.376	0.354	0.333	0.314	0.296	0.279
8	0.434	0.404	0.376	0.351	0.327	0.305	0.285	0.266	0.249	0.233
9	0.391	0.361	0.333	0.308	0.284	0.263	0.243	0.225	0.209	0.194
10	0.352	0.322	0.295	0.270	0.247	0.227	0.208	0.191	0.176	0.162
11	0.317	0.287	0.261	0.237	0.215	0.195	0.178	0.162	0.148	0.135
12	0.286	0.257	0.231	0.208	0.187	0.168	0.152	0.137	0.124	0.112
13	0.258	0.229	0.204	0.182	0.163	0.145	0.130	0.116	0.104	0.093
14	0.232	0.205	0.181	0.160	0.141	0.125	0.111	0.099	0.088	0.078
15	0.209	0.183	0.160	0.140	0.123	0.108	0.095	0.084	0.079	0.065
16	0.188	0.163	0.141	0.123	0.107	0.093	0.081	0.071	0.062	0.054
17	0.170	0.146	0.125	0.108	0.093	0.080	0.069	0.060	0.052	0.045
18	0.153	0.130	0.111	0.095	0.081	0.069	0.059	0.051	0.044	0.038
19	0.138	0.116	0.098	0.083	0.070	0.060	0.051	0.043	0.037	0.031
20	0.124	0.104	0.087	0.073	0.061	0.051	0.043	0.037	0.031	0.026

Cumulative present value of 1.00 unit of currency per annum, Receivable or Payable at the end of each year for n years $\left[\frac{1-(1+r)^{-n}}{r}\right]$

Periods	Interest rates (r)									
(n)	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909
2	1.970	1.942	1.913	1.886	1.859	1.833	1.808	1.783	1.759	1.736
3	2.941	2.884	2.829	2.775	2.723	2.673	2.624	2.577	2.531	2.487
4	3.902	3.808	3.717	3.630	3.546	3.465	3.387	3.312	3.240	3.170
5	4.853	4.713	4.580	4.452	4.329	4.212	4.100	3.993	3.890	3.791
6	5.795	5.601	5.417	5.242	5.076	4.917	4.767	4.623	4.486	4.355
7	6.728	6.472	6.230	6.002	5.786	5.582	5.389	5.206	5.033	4.868
8	7.652	7.325	7.020	6.733	6.463	6.210	5.971	5.747	5.535	5.335
9	8.566	8.162	7.786	7.435	7.108	6.802	6.515	6.247	5.995	5.759
10	9.471	8.983	8.530	8.111	7.722	7.360	7.024	6.710	6.418	6.145
11	10.368	9.787	9.253	8.760	8.306	7.887	7.499	7.139	6.805	6.495
12	11.255	10.575	9.954	9.385	8.863	8.384	7.943	7.536	7.161	6.814
13	12.134	11.348	10.635	9.986	9.394	8.853	8.358	7.904	7.487	7.103
14	13.004	12.106	11.296	10.563	9.899	9.295	8.745	8.244	7.786	7.367
15	13.865	12.849	11.938	11.118	10.380	9.712	9.108	8.559	8.061	7.606
16	14.718	13.578	12.561	11.652	10.838	10.106	9.447	8.851	8.313	7.824
17	15.562	14.292	13.166	12.166	11.274	10.477	9.763	9.122	8.544	8.022
18	16.398	14.992	13.754	12.659	11.690	10.828	10.059	9.372	8.756	8.201
19	17.226	15.679	14.324	13.134	12.085	11.158	10.336	9.604	8.950	8.365
20	18.046	16.351	14.878	13.590	12.462	11.470	10.594	9.818	9.129	8.514

Periods	Interest rates (r)									
(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2	1.713	1.690	1.668	1.647	1.626	1.605	1.585	1.566	1.547	1.528
3	2.444	2.402	2.361	2.322	2.283	2.246	2.210	2.174	2.140	2.106
4	3.102	3.037	2.974	2.914	2.855	2.798	2.743	2.690	2.639	2.589
5	3.696	3.605	3.517	3.433	3.352	3.274	3.199	3.127	3.058	2.991
6	4.231	4.111	3.998	3.889	3.784	3.685	3.589	3.498	3.410	3.326
7	4.712	4.564	4.423	4.288	4.160	4.039	3.922	3.812	3.706	3.605
8	5.146	4.968	4.799	4.639	4.487	4.344	4.207	4.078	3.954	3.837
9	5.537	5.328	5.132	4.946	4.772	4.607	4.451	4.303	4.163	4.031
10	5.889	5.650	5.426	5.216	5.019	4.833	4.659	4.494	4.339	4.192
11	6.207	5.938	5.687	5.453	5.234	5.029	4.836	4.656	4.486	4.327
12	6.492	6.194	5.918	5.660	5.421	5.197	4.988	7.793	4.611	4.439
13	6.750	6.424	6.122	5.842	5.583	5.342	5.118	4.910	4.715	4.533
14	6.982	6.628	6.302	6.002	5.724	5.468	5.229	5.008	4.802	4.611
15	7.191	6.811	6.462	6.142	5.847	5.575	5.324	5.092	4.876	4.675
16	7.379	6.974	6.604	6.265	5.954	5.668	5.405	5.162	4.938	4.730
17	7.549	7.120	6.729	6.373	6.047	5.749	5.475	5.222	4.990	4.775
18	7.702	7.250	6.840	6.467	6.128	5.818	5.534	5.273	5.033	4.812
19	7.839	7.366	6.938	6.550	6.198	5.877	5.584	5.316	5.070	4.843
20	7.963	7.469	7.025	6.623	6.259	5.929	5.628	5.353	5.101	4.870

FORMULAE

Valuation Models

(i) Irredeemable preference share, paying a constant annual dividend, *d*, in perpetuity, where P_0 is the ex-div value:

$$P_0 = \frac{d}{k_{\text{pref}}}$$

(ii) Ordinary (Equity) share, paying a constant annual dividend, *d*, in perpetuity, where P_0 is the ex-div value:

$$P_0 = \frac{d}{k_e}$$

(iii) Ordinary (Equity) share, paying an annual dividend, *d*, growing in perpetuity at a constant rate, *g*, where P_0 is the ex-div value:

$$P_0 = \frac{d_1}{k_e - g} \text{ or } P_0 = \frac{d_0[1 + g]}{k_e - g}$$

(iv) Irredeemable (Undated) debt, paying annual after tax interest, *i*(1-*t*), in perpetuity, where P_0 is the ex-interest value:

$$P_0 = \frac{i[1 - t]}{k_{d\text{net}}}$$

or, without tax:

$$P_0 = \frac{i}{k_d}$$

(v) Future value of *S*, of a sum *X*, invested for *n* periods, compounded at *r*% interest:

$$S = X[1 + r]^n$$

(vi) Present value of £1 payable or receivable in *n* years, discounted at *r*% per annum:

$$PV = \frac{1}{[1 + r]^n}$$

(vii) Present value of an annuity of £1 per annum, receivable or payable for *n* years, commencing in one year, discounted at *r*% per annum:

$$PV = \frac{1}{r}\left[1 - \frac{1}{[1 + r]^n}\right]$$

(viii) Present value of £1 per annum, payable or receivable in perpetuity, commencing in one year, discounted at *r*% per annum:

$$PV = \frac{1}{r}$$

(ix) Present value of £1 per annum, receivable or payable, commencing in one year, growing in perpetuity at a constant rate of *g*% per annum, discounted at *r*% per annum:

$$PV = \frac{1}{r - g}$$

Cost of Capital

(i) Cost of irredeemable preference capital, paying an annual dividend, *d*, in perpetuity, and having a current ex-div price P_0:

$$k_{pref} = \frac{d}{P_0}$$

(ii) Cost of irredeemable debt capital, paying annual net interest, $i(1 - t)$, and having a current ex-interest price P_0:

$$k_{d\,\text{net}} = \frac{i[1 - t]}{P_0}$$

(iii) Cost of ordinary (equity) share capital, paying an annual dividend, *d*, in perpetuity, and having a current ex-div price P_0:

$$k_e = \frac{d}{P_0}$$

(iv) Cost of ordinary (equity) share capital, having a current ex-div price, P_0, having just paid a dividend, d_0, with the dividend growing in perpetuity by a constant *g*% per annum:

$$k_e = \frac{d_1}{P_0} + g \quad \text{or } k_e = \frac{d_0[1 + g]}{P_0} + g$$

(v) Cost of ordinary (equity) share capital, using the CAPM:

$$k_e = R_f + [R_m - R_f]ß$$

(vi) Weighted average cost of capital, k_0:

$$k_0 = k_e\left[\frac{V_E}{V_E + V_D}\right] + k_d\left[\frac{V_D}{V_E + V_D}\right]$$

P10 - Test of Professional Competence in Management Accounting

May 2006

Thursday Afternoon Session