ADVANCED LEVEL CASE STUDY EXAMINATION
NOVEMBER 2021
(4 HOURS)

ICAEW PARTNER IN LEARNING

ACA MASTERS

Case Study: Mock Exam 1

Guidance:

To obtain maximum benefit, this mock exam should be sat under full exam conditions using the Case Study CBE software which is available from the ICAEW website. You should use the exam technique taught during the 'How to Ace the ACA Case Study' class.

Once you have completed the exam, you should use the marking grids provided to calculate whether you have scored enough passing grades for each section.

In order to improve your grade, you should carefully analyse how the report has been structured and written in the prize-winner model answer.

EXHIBIT 18

EMAIL

From: Val Williams
To: Jace Moon
Subject: Draft management accounts and business developments
Date: 3 November 2021

We have just received the latest draft management accounts from DGS. We need to review these, and we also need to address two business issues facing DGS. I am attaching the following:

- Draft management accounts for the year ended 30 September 2021 **(Exhibit 19)**
- Additional information relating to the management accounts **(Exhibit 20)**
- An email from Louis Bailey to me about a new product **(Exhibit 21a)**, together with media coverage **(Exhibit 21b)**
- An email from Stephanie Bailey to me about the DGS website **(Exhibit 22a)**, together with media coverage **(Exhibit 22b)**

Please draft for my review a report addressed to the DGS board. The report should comprise the following.

1. A review of DGS's draft management accounts for the year ended 30 September 2021 in comparison with the year ended 30 September 2020.

Your review should be based on the management accounts as set out in **Exhibit 19**. It should cover revenue, for each channel and in total; total cost of sales; and total gross profit. In your review you should refer to the additional information provided in **Exhibit 20**. You should also include a response to the request for advice concerning the KPI issue (**Exhibit 20**).

2. An evaluation of the proposal to launch the new vegan dog food product, Green Dog (**Exhibit 21a)**.

Using the information in **Exhibit 21a,** you should calculate the predicted ROI for the new product. You should assess the adequacy of the assumptions and estimates. You should include in your evaluation the ethical and business trust issues that DGS should consider when making its decision, including those arising from **Exhibit 21b**. You should recommend, with reasons, whether DGS should proceed with the soft launch.

3. An evaluation of the proposal to begin e-commerce operations and engage Pro-Online Marketing (POM), a digital marketing agency (**Exhibit 22a**).

You should identify, with relevant calculations, the financial, operational and strategic risks and benefits that DGS should consider when deciding whether to proceed. You should incorporate any ethical and business trust aspects, including those arising from **Exhibit 22b**.

EXHIBIT 19

DGS: Draft management accounts for the year ended 30 September 2021

Statement of profit and loss for the year ended 30 September 2021

	£000
Revenue (Note 1)	15,997
Cost of sales (Note 2)	(13,099)
Gross profit	**2,898**
Distribution costs	(1,195)
Administrative expenses	(1,366)
Operating profit	**337**
Net finance expense	(105)
Profit before taxation	232
Income tax	(44)
Profit for the year	**188**

Statement of financial position as at 30 September 2021

	£000
Non-current assets	
Property, plant and equipment (PPE) (Note 3)	2,121
	2,121
Current assets	
Inventories (Note 4)	1,745
Trade and other receivables (Note 5)	2,229
Cash and cash equivalents	994
	4,968
TOTAL ASSETS	**7,089**
Equity	
Ordinary shares	5
Retained earnings	3,950
	3,955
Non-current liabilities	
5% bank loan (Note 6)	2,100
Current liabilities	
Trade and other payables (Note 7)	990
Taxation	44
	3,134
TOTAL EQUITY AND LIABILITIES	**7,089**

Statement of cash flows for year ended 30 September 2021

	£000
Cash flows from operating activities	
Profit before taxation	232
Adjustments for:	
Depreciation	371
Profit on disposal of PPE	(13)
Finance expense	105
	695
Change in inventories	(122)
Change in trade and other receivables	(316)
Change in trade and other payables	97
	354
Income tax paid	(95)
Net cash generated from operating activities	**259**
Investing activities	
Acquisition of PPE	(62)
Proceeds from disposal of PPE	73
Net cash generated from investing activities	**11**
Financing activities	
Interest paid	(105)
Dividends paid	(500)
Cash flows used financing activities	**(605)**
Net change in cash and cash equivalents	(335)
Cash and cash equivalents at start of period	1,329
Cash and cash equivalents at end of period	**994**

Notes to the management accounts

Note 1: Revenue by channel

	£000
Veterinary practices	3,249
Specialist pet stores	6,993
Other	1,372
Taylors	4,383
	15,997

Note 2: Cost of sales by category

	£000
Materials	6,683
Production labour	1,728
Production overheads	4,688
	13,099

Note 3: PPE

	£000
Cost	
1 October 2020	5,788
Additions	62
Disposals	(152)
30 September 2021	5,698
Depreciation	
1 October 2020	3,298
Charge for year	371
On disposals	(92)
30 September 2021	3,577
Carrying amount	
30 September 2021	**2,121**

Note 4: Inventories

	£000
Packaging and consumables	373
Raw materials	770
Finished goods	602
	1,745

Inventories are carried at the lower of cost and net realisable value.

Note 5: Trade and other receivables

	£000
Trade receivables	1,997
Other receivables and prepayments	232
	2,229

Note 6: 5% bank loan

The loan is secured on land included in PPE. The interest on the loan is at a fixed rate of 5% and payable annually in arrears. The loan is repayable in 2030 and carries an early redemption penalty.

Note 7: Trade and other payables

	£000
Trade payables	602
Other payables	388
	990

EXHIBIT 20

Note from Preet Sharma, 1 November 2021: Additional information relating to the draft management accounts for the year ended 2021

I have set out below some information that should assist in the analysis of revenue and gross profit for the year ended 30 September 2021.

The following issues are reflected in the management accounts.

- In April 2021, Veterinary Support Trust (VST) signed an exclusivity deal with Pet Alliance Wholesalers (PAW) and ceased selling all DGS products. In addition, several other vet clients were acquired by larger practices throughout the year and were no longer permitted to stock DGS products.

- To ensure that the loss of VST and other clients was compensated for, Louis Bailey extended the parameters for the level of discount that could be offered by the sales and business development team.

- Our sales and business development team recruited a significant amount of new pet store clients. The RRP value of sales to pet stores was £10,600k.

- The proportion of Taylors' revenue generated through its website continued to rise as pet owners, and consumers in general, increased online purchases.

- The popularity of Nu-Dog-Fit continued to grow with revenue of £613k on a sales volume of 150 tonnes. During the year, there was a soft launch of the kibble range.

- The number of clients at the end of the year was as follows:

Channels	Number of clients
Veterinary practices	433
Specialist pet stores	158
Other	107
Total	**698**

- There was a significant increase in late amendments to monthly orders from large clients across all channels. The unexpected changes contributed to a 7% increase in production hours.

- The materials wastage KPI was 10.2%.

KPI issue

Louis Bailey has advised me that during Hugh Logan's quarterly performance review on 18 October 2021 he raised concerns that Hugh's average revenue was considerably lower than the company average and other members of the sales team. Hugh claimed that other members of the team had been offering excessive discounts and credit terms to clients in order to improve their own performance assessment. Hugh also stated that if the commission structure is not changed within the next two months, he will return to PAW and take Pets in Paradise (PiP) with him.

We need to find out if the allegations made by Hugh can be substantiated and decide what actions DGS should take to deal with the issue.

EXHIBIT 21a

EMAIL

From: Louis Bailey
To: Val Williams
Subject: New product launch
Date: 28 October 2021

We are considering the launch of a new dog food product, Green Dog. Following the success of Nu-Dog-Fit, we believe there is a growing market for health-based dog food products.

The new product will be made entirely from non-animal products. The product will be marketed as a vegan dog food providing a range of benefits: better heart health; improved cardiovascular performance; higher nutrient density; mood-enhancement; and environmentally sustainable.

Initial market research conducted in September 2021 identified that:

- The number of people in the UK eating a vegan or plant-based diet increased by around 40% in 2020.
- Young people (aged between 16-34) accounted for most of the increase.
- 78% of people eating a vegan or plant-based diet want the same for their pets.
- There is currently a very limited number of vegan dog food products available.
- Two major pet food manufacturers plan to release a pet health food range in 2022.

Assumptions and estimates

1. A soft launch will take place on 30 November 2021 with an official product launch planned for 1 January 2022.

2. The formulation of the recipe is expected to cost £6k.

3. The prototyping costs are expected to be £9k. As we will be targeting a similar customer base to Nu-Dog-Fit, we expect the use of focus groups and pilot testing to be limited.

4. Marketing costs will be £15k.

5. The costs of promotional events are expected to be £80k. Charlie is looking at ways this can be reduced via use of free social media marketing.

6. Predicted revenue for the year ended 31 December 2022 is £240k. This based on a predicted volume of 40 tonnes and RRP of £6.50.

7. Predicted revenue for the year ended 31 December 2023 is £560k. This based on a predicted volume of 80 tonnes and RRP of £9.00.

8. Predicted costs are set out below.

	Year ended 31 December 2022 £000	Year ended 31 December 2023 £000
Materials	170	340
Labour	18	36
Production	47	94

Suppliers
As the product will not contain one of our traditional protein sources, we need to find a new supplier who can provide a plant-based protein source. Initial research has identified two suppliers. The first supplier is in the UK and is a reputable supplier of plant-based products. The second is located overseas and offers a similar product but at a much lower price. The estimations above assume that we will use the UK supplier. However, we may need to consider the overseas supplier if it would have an impact of acceptability of the project.

EXHIBIT 21b

Are plants all they are cracked up to be? (Food Monthly, May 2021)

Diet fads come and go, but it appears as though the 'plant-based diet' is here to stay. The popularity of such diets has increased exponentially over the past 5 years. In the past, the primary motivation for such diets was animal welfare and religion, whereas the recent increase is primarily due to environmental considerations and health benefits. This is despite many of the reported health benefits remaining unproven.

The most notable increase is in younger generations, with social media being a significant influencing factor. Celebrities from pop singers to sports stars have been advocating the benefits of such diets. In fact, a popular reality TV star recently posted a picture of her dog eating a vegan meal. This sparked quite a debate as some of her followers commented that dogs need to eat meat as their bodies are incompatible with a meat-free diet. Others, including a veterinary nutritionist, claimed that dogs can eat a plant-based diet if it is carefully formulated to ensure that the animal gets all their nutritional needs.

Who's your supplier's supplier? (Business Times, August 2021)

The length of supply chains has increased substantially over the last thirty years. In a not too distant memory, food would be produced from the local farm and sold in local markets or the high street. Although not offering the same choice and convenience as today, this gave customers certainty over the source of their food. Nowadays, ingredients can be grown on one continent, processed into food on a different continent, packaged for sale on another, before being shipped to the continent of sale!

Businesses often just look at their immediate supplier when assessing the appropriateness of a product. This exposes them to huge risks as they do not have complete visibility as to the origin.

EXHIBIT 22a

EMAIL

From: Stephanie Bailey
To: Val Williams
Subject: DGS website
Date: 2 November 2021

The board are considering a proposal to sell Direct-To-Customer (DTC) via the DGS website. This will require the development of an e-commerce platform so that DGS products can be listed and sold on the website.

The website will also include: updates on new product developments; videos of sales staff explaining the benefits of DGS products compared with competitors; a blog containing posts by nutritionists; customer feedback and product reviews; the ability for customers to make automated recurring purchases; the option to sign up to a weekly newsletter. The newsletter will provide details of recent price promotions and benefits of DGS products.

In recent years, clients have insisted on larger discounts and longer credit terms. Due to their increasing size, DGS has had no choice but to accept. This has put sustained and increasing pressure on margins and cash. By selling DTC, DGS will be able escape this pressure, enhance margins and improve cash generation.

The website enhancements will enable us to obtain more insight into our customer base as we can gather data to see which products are most popular and which receive the highest and lowest reviews. We can also see which blogs and videos are most popular and tailor future content accordingly. By monitoring purchase data, we can also determine our customer retention rate.

Proposed actions

1. DGS will engage Pro-Online Marketing (POM), a digital marketing agency, to develop an e-commerce platform on the DGS website.

2. POM will run an ongoing digital marketing campaign to increase the number of visitors to the website.

3. The sales and business development team will regularly update the website with news on new product developments and videos comparing DGS products with competitors. The team will also prepare and send out the weekly newsletter.

4. Nutritionists will work with the sales and business development team to develop blog articles.

5. Charlie Bailey will have overall responsibility for all e-commerce and digital marketing matters in his new role as Head of E-commerce and Digital Marketing.

Proposed terms and expected benefits

POM estimates (based on experience with other clients)

Benefits	**Visitors per month**
Increase in organic traffic	7,000
Increase in traffic due to paid adverts	800
Increase in traffic due to affiliates	1,400
Average click-through-rate	30%
Costs	
Monthly retainer	£3,800 per month
Paid ads	£23 per click*
Affiliate costs	3% of attributable revenue
Initial cost for development of e-commerce platform	£180,000

*Due to most pet food manufacturers competing in the same advertising space, the cost of adverts in this market is relatively high.

Analysis performed by the sales and business development team

Average product RRP per kg	£5.00
Average quantity purchased	14 kgs
Average discount for DTC sales	10%
Average cost of product sold per kg	£2.80

EXHIBIT 22b

RECENT MEDIA COVERAGE

Data is the new gold (Marketing Monthly, June 2021)

Companies are increasingly realising the value of the data they gather on their customers. This data can be used to increase sales by focussing marketing efforts on products and services which are most popular. Marketing can also be tailored to individual customers by offering promotions based on their individual purchasing habits.

That is not all. Companies can also sell data on customers to earn further income. This can be done by selling the underlying data (name, email address) or the insights gathered from the data (online behaviour, purchasing patterns).

One marketing executive described data gathering as undergoing a gold rush with businesses scrambling to gather as much data as they can.

In response to concerns over customer privacy, a raft of new regulations has been introduced.

Posting on social media relating to pet food sector

"I used to follow Rebecca Ryan and really valued her opinions on everything from politics to the best brand of dog food, but after reading about her involvement in the match-fixing scandal I won't be following her anymore. Or buying PAW dog food either!"

Mock Exam 1 Mark Scheme

	OVERALL ASSESSMENT CRITERIA	EXECUTIVE SUMMARY R1 - Review of financial performance
	• Appropriate layout: headings AND paragraphs/sentences • Appropriate disclaimer AND report from firm • Suitable language: formal AND tactful AND ethical • Reasonable spelling and grammar	• Revenue: qualitative comment **with fig** • COS: qualitative comment **with fig** • GP/GP%: qualitative comment **with fig** • Concludes on KPI issue
	NA ID IC SC CC	**NA ID IC SC CC**
		• Revenue: average revenue per client continued decline / revenue decline without Taylors • GP/GP%: continued decline a serious concern • Change sales team KPIs / reassess discount parameters • Appropriate summary of report section
	NA ID IC SC CC	**NA ID IC SC CC**

R2 - Evaluation of product launch proposal	R3 - Evaluation of e-commerce proposal
• Gives expected ROI • Evaluates revenue assumptions • Evaluates costs assumptions • Health benefits unclear / competitors challenging health claims	• Calculates total revenue/GP/OP with fig • Concludes that loss of existing clients is financial risk • Concludes on main operational/strategic **risk** • Concludes on main operational/strategic **benefit**
NA ID IC SC CC	**NA ID IC SC CC**
• Proceed with soft launch • Quality / reputation more important than price • DD/audit on potential suppliers / claims must be substantiated • Appropriate summary of report section	• Concludes on way forward with reason • Business trust: data should be used lawfully • Other commercial recommendations • Appropriate summary of report section
NA ID IC SC CC	**NA ID IC SC CC**

REQUIREMENT 1 – Review of financial performance

ASSIMILATING & USING INFORMATION	STRUCTURING PROBLEMS & SOLUTIONS
Appendix 1 • Presents 2021 figures • Presents 2020 figures • Analysis of revenue by channel • Analysis of COS AND GP/GPM	**Financial analysis: revenue (report)** • Vets: decline due to concentration of clients / VST loss > • Pet stores: up due to discounts (av.34% v 30%) > • Other: relies in-person sales which are declining > • Taylors: continued increase in online activity > • Nu-Dog-Fit: £613k significant contribution to revenue / price per kg down (£4.09 v £4.17) > • Mix: Vets (20.3% v 25.4%) / Pet (43.7% v 39.7%) / Other (8.6% v 15.7%) / Taylors (27.4% v 19.2%)
NA ID IC SC CC	NA ID IC SC CC
AI/CS Exam info (report/appendix) • Overall revenue: up £616k / up 4.0% • Vets: down £664k / down 17.0% • Pet stores: up £888k / up 14.5% • Other: down £1,039k / down 43.1% • Taylors: up £1,431k / up 48.5%	**Financial analysis: COS/GP (report)** • Overall COS: up £814k / 6.7% > • Materials: up £490k / 7.9% / 41.8% rev > • Labour: up £91k / 5.6% / 10.8% rev > • Overheads: £243k / 5.5% / 29.3% rev > • GP down £208k / 6.7% / GP% down 18.1% v 20.2% >
NA ID IC SC CC	NA ID IC SC CC
Business issues / wider context • Impact of COVID-19 on business / economic downturn • Ind trends: increase in pet ownership / demand for specialised pet food / online sales growth • Ind: UK dog food market is approximately £1.5bn • KPIs based on revenue • Price-based competition due to concentration • 2020 growth: 2.6%	**KPI Issue** • HL previously complained about commission structure > • Reports of excessive discounting/credit terms > • Receivables up 16.5%/18.4% / days 45.6 v 40 > • GP% decline partly due to discounting > • VST and PiP large clients won by HL / complaints > • HL threats to take PiP back to PAW >
NA ID IC SC CC	NA ID IC SC CC

REQUIREMENT 1 – Review of financial performance

APPLYING JUDGEMENT	CONCLUSIONS AND RECOMMENDATIONS
Evaluation of revenue analysis • Number of clients down AND av. revenue per client down / client losses (£131k) / av. revenue impact (£533k) • Number of clients up AND av. revenue per client down / client gains (£1,612k) / av. revenue impact (£724k) • Decline accelerating / serious concern / worst performing channel • Revenue decline without Taylors / Taylors increasing importance • Compares with 2021 prediction • Compares to industry growth/DGS 2020 growth / average revenue per client **down again**	**Draws conclusions (under a heading)** • Revenue: qualitative comment **with fig** • COS: qualitative comment **with fig** • GP/GP%: qualitative comment **with fig** • Concludes on KPI issue
NA ID IC SC CC	**NA ID IC SC CC**
Evaluation of COS/GP • Compares COS/fall in GP to revenue • Materials: wastage up £81k/13.5% / 10.2% above target • Labour: 7% increase in production hours / increase accelerating • Overheads: increased no. of production runs due to unexpected changes/new product variants/higher volumes/new clients • GP/GP%: decline a serious concern / discounts increasing / all costs increasing as % of revenue	**Makes recommendations** • Further analysis by channel / further cost analysis • Introduce BTC sales via website • Win more retail clients • Enforce client order deadline • Invest in pigging to reduce wastage • Other commercial recommendations
NA ID IC SC CC	**NA ID IC SC CC**
Evaluation / recs on KPI issue • Lowest average revenue per client for consecutive year • Investigate reports of excessive discounting/credit terms / compare with parameters set by Louis Bailey • Increased sales to Taylors will be contributing factor • Change KPIs to focus on profit / reassess discount parameters • Both included in Suzanne Coder numbers / VST lost as client • Seek legal advice / find resolution to bonus issues	
NA ID IC SC CC	**NA ID IC SC CC**

REQUIREMENT 2 – Evaluation of product launch proposal

ASSIMILATING & USING INFORMATION	STRUCTURING PROBLEMS & SOLUTIONS
Appendix 2 • Numbers labelled AND clearly derived • Calculation of 2022 GP • Calculation of 2023 GP • Calculation of ROI using two-year average GP	**Calc of profit (appx or report)** • Revenue: £240k AND £560k • Materials: £170k AND £340k • Labour: £18k AND £36k • Production: £47k AND £94k • GP: 2022 £5k AND 2023 £90k / £95k total • ROI: 43.2%
NA ID IC SC CC	**NA ID IC SC CC**
AI/CSE information (report/appendix) • Formulation: £6k • Prototyping and focus groups: £9k • Marketing: £15k • Promotional: £80k	**Assumptions** • Formulation/prototyping: could be higher > • Marketing: costs low compared with Nu-Dog-Fit > • Promotional: could be higher as not traditional customer > • Materials: need new suppliers > • Labour/production: Nu-Dog-Fit costs predicted accurately > • Likely be unexpected revenues from soft launch
NA ID IC SC CC	**NA ID IC SC CC**
Business issues / wider context • Impact of COVID-19 on the business • Owners reflecting their lifestyle onto pets / increase in vegan/plant diets • 70% of owners look for heart health / 10% of products promote heart • Wastage/production costs increasing • Nu-Dog-Fit ahead of predictions • Bank balance £994k at year end	**Comments on ethical / business trust issues** • Price paid for materials will impact ROI calculation > • Dog food is heavily regulated > • Health benefits are unclear > • Plant-based foods have lower environmental impact > • Difficulty tracing ingredients > • Stephanie Bailey wants to be able to personally guarantee the integrity of the ingredients >
NA ID IC SC CC	**NA ID IC SC CC**

REQUIREMENT 2 – Evaluation of product launch proposal

APPLYING JUDGEMENT	CONCLUSIONS AND RECOMMENDATIONS
Evaluation of revenue assumptions • Changes in assumptions will impact calculations • Volume: market could be larger/smaller than anticipated / compares with Nu-Dog-Fit • Discounts: low compared with average discount / introductory discounts for Nu-Dog-Fit • Year 2: RRP increase seems high / exceeding target ROI dependant on year 2 • GP% below DGS 2021 GP% • Competitor activity could impact volumes and price / potential first mover advantage	**Draws conclusions (under a heading)** • Gives expected ROI • Compares ROI to 25% target • Evaluates/questions assumptions • Concludes on ethics/business trust issues • Proceed with soft launch
NA ID IC SC CC	**NA ID IC SC CC**
Evaluation of cost assumptions • Dissimilar to existing recipes / requires careful formulation • Could be some overlap with previous campaigns / similarities with Nu-Dog-Fit customers • Different from existing portfolio so costs will be high / young people use SM so could be lower • Number of variants will impact costs / expensive ingredients will increase wastage cost • Existing issues with production / late orders / capacity issues / output capacity highly predictable • May be economies of scale in 2023 / timeframes short	**Makes recommendations** • Pilot testing / focus groups • Further research to assess future demand • Negotiate with suppliers • Due diligence on potential suppliers • Set timetable for activities • Other commercial recommendations
NA ID IC SC CC	**NA ID IC SC CC**
Evaluation/recs: ethical/business trust • Quality is primary consideration / GP/ROI sufficient with either supplier • Potential fines / reputational damage for any breaches • Competitors prepared to contest health claims / ensure any marketing claims can be supported • Will enhance DGS brand with younger customers / overseas supplier will increase transport/CO2 footprint • Require supplier evidence over ingredients • Quality assurance is required throughout supply chain / supplier audits required	
NA ID IC SC CC	**NA ID IC SC CC**

REQUIREMENT 3 – Evaluation of digital marketing proposal

ASSIMILATING & USING INFORMATION	STRUCTURING PROBLEMS & SOLUTIONS
Workings / report • Numbers labelled AND clearly derived • Calculation of revenue benefit from each activity • Calculates costs of each activity • Calculates GP or OP	**Financial calculations (appx or report)** • COS: £108,192 • GP: £65,688 • Delivery: 7.5% or own fig • Agency: £22,994 • OP: £29,653 per month / £355,838 per annum • Calculates OP% AND compares to DGS (2.1%)
NA ID IC SC CC	**NA ID IC SC CC**
AI/CSE information (report/workings) • Visitors: 7000 + 800 + 1400 • CTR: uses 30% • Costs: £3800 monthly retainer • Costs: uses £23 per ad • Costs: 3% for affiliate revenue	**Operational and strategic benefits** • Will enhance DGS brand / more control over brand management • Direct feedback from customers / engagement with customer will help improve products • Reduced power of clients / reduced dependency • Better control over orders will reduce pressure on production team • Regular subscriptions will help production planning • Catch up with competitors who have online presence
NA ID IC SC CC	**NA ID IC SC CC**
Business issues / wider context • Impact of COVID-19 on the business • Young pet owners more likely to shop online / increase in e-commerce activity / Taylors increase • Increasing discounts putting pressure on margins • Nu-Dog-Fit success / Green Dog targeting younger market • POM: digital marketing agency / young staff / experience in increasing traffic and sales • Bank balance £994k at year end	**Comments on ethical/bus trust issues** • Charlie promoted to senior role / may not have sufficient management experience > • Obtain data on customer purchase behaviour > • Actions of PAW influencer have damaged PAW brand > • CTR appears high compared with high with company X > • DGS undercutting clients via DTC sales > • Change in business model will impact production >
NA ID IC SC CC	**NA ID IC SC CC**

REQUIREMENT 3 – Evaluation of digital marketing proposal

APPLYING JUDGEMENT	CONCLUSIONS AND RECOMMENDATIONS
Evaluation of financial benefits/risks • Any changes in assumptions will impact calculations • Paid ads are net cost / cost linked to visitors not sales • Increase in GPM as no client discount/margin / customer discount lower than client discount • Significant increase in OP/OPM / reverses recent decline • Benefit will increase over time as traffic builds / initial investment: not factored in/low v benefit • Cashflow: sufficient cash for initial investment / no credit terms for DTC customers	**Draws conclusions (under a heading)** • Calculates total revenue/GP/OP with fig • Concludes on main operational/strategic issue • Concludes on ethics/business trust issues • Concludes on way forward with reason
NA ID IC SC CC	**NA ID IC SC CC**
Operational/strategic risks • Could damage relationship with existing clients / loss of key client could be disastrous • No experience selling direct / new systems required eg delivery, order process • Could result in lost revenue from other channels • Orders could be less predictable / could require more inventory storage • Staff training required on new systems / website content eg blogging, videos, newsletters • Additional costs e.g. admin, IT, management time / more frequent deliveries for DTC/higher cost	**Makes recommendations** • Negotiate with POM / get second quote • Further research on potential sales volumes • Discuss with sample of clients • Due diligence on POM / affiliates • Forecast production/inventory impact • Other commercial recommendations
NA ID IC SC CC	**NA ID IC SC CC**
Evaluation/recs: ethical/business trust • Potential favouritism / family business / succession planning / experience at POM • GDPR / payment data handling / unsubscribe option on newsletter / customer consent • Risk of affiliates damaging DGS brand / no control over affiliates • POM has incentive to overstate to obtain work • Clients demanding discounts/credit terms / no contractual restriction / discuss with clients • Team already stressed / quality risk / incident / plant under pressure / consult with Ade John	
NA ID IC SC CC	**NA ID IC SC CC**

Mock Exam 1 Model Answer

A report on Dog Gourmet Supplies (DGS) Limited

TO: Directors of DGS Limited

FROM: Oakley Dunstable

DATE: 3 November 2021

This report is for the Board of DGS Limited only and should not be distributed to third parties.

No liability can be accepted in this event.

Executive Summary

REVIEW OF FINANCIAL PERFORMANCE FOR YEAR ENDED 30 SEPTEMBER 2021

Overall revenue increased moderately by £616k (4.0%) to £15,997k which is a reasonable performance in a market which grows globally by 5% on average. Excluding Taylors, revenue has continued to decrease (£815k/6.6% decline). The number of clients has increased by 17, causing an increase in revenue of £310k. The has been a decrease in the average revenue per client of £1.61k to £16.64k, causing a decrease in revenue of £1,125k which more than offsets the client gains.

Revenue from Vets decreased disappointingly by £664k (17.0%) due to the loss of VST and other clients. Pet stores revenue increased impressively by £888k (14.5%) due to greater discounts being offered (34% v 30% in 2020). Other revenue decreased dramatically by £1,039k (43.1%) due to sales being primarily in person. Revenue from Taylors increased impressively by £1,431k (48.5%) due to increasing online sales. Notably, Taylors accounts for 27.4% (2020: 19.2%) of revenue. This shows the increasing importance of Taylors.

COS increased by £824k (6.7%) due to an increase in all costs and increased faster than revenue which will have a negative impact on GPM. Also, materials increased by £490k (7.9%) partly due to an increase in wastage of £81k (13.5%) which at 10.2% is above the target of 7% and 5% which is considered exceptional. Materials are now 41.8% (2020: 40.3%) of revenue.

GP decreased disappointingly by £208k (6.7%), with a GPM decrease to 18.1% from 20.2%, due to increased discounts, a revenue shift towards Taylors which has a higher discount, poor control of costs and all COS lines increasing as a % of revenue.

The fall in the GPM and the increase in the average discount on pet store sales shows that discounts have increased. However, increased discounts were permitted by Louis Bailey. Other factors such as Taylors accounting for a larger portion of revenue also explains the decline in GPM. Hugh Logan previously raised concerns that VST and PiP were not being serviced well. VST left during the year so losing PiP as well would be a significant loss for DGS.

RECOMMENDATIONS

Change KPIs so that profit and cash are considered.
Introduce BTC sales via website to improve margins.
Enforce client order deadlines.

**highlighted text demonstrates key points to bring to the attention of the directors. These were not included in the conclusions and were added to the Executive Summary.*

FINANCIAL EVALUATION OF NEW PRODUCT PROPOSAL

The predicted ROI is 43.2% so DGS should proceed with the soft launch as it exceeds the 25% target. GPM will be 2.1% in the first year and 16.1% in the second year. Both are lower than the existing GPM of 18.1%. Furthermore, this appears to be a growing market so revenue and profits will likely increase beyond the forecast period. There could also be economies of scale if future volumes increase.

Sales volume could be higher as Nu-Dog-Fit's sales volume was 20% higher in its first year. However, Green Dog may be targeting a smaller market so volume could be lower. Also, the average selling price only includes a discount of 7.7% (2022) and 22.2% (2023) which is low compared to the average discount offered for existing products.

Costs of materials could be higher as a new supplier will be required. The recent increases in wastage will increase the cost further. Also, formulation and prototyping costs are likely to be higher because formulation will not be like existing recipes which use meat and fish as the protein source.

If initial investment costs are 50% higher due to it being a new recipe and different product, then ROI will still be 28.8%.

Green Dog is going to be marketed based on health benefits which may be contentious. Competitors are prepared to openly challenge such claims. This could lead to reputational damage for DGS. In addition, DGS selects suppliers based on quality and not price. Whilst the cost will impact the ROI calculation, quality should be the primary consideration.

RECOMMENDATIONS

Ensure that all claims can be supported.
Conduct pilot testing and further research to help shape final product.
Due diligence on suppliers.

EVALUATION OF E-COMMERCE AND POM PROPOSAL

Revenue will be £2,087k per annum which will add a significant 13% to existing revenue. Revenue is likely to increase in future years as more customers become aware of the DGS website. GPM on the website sales will be 37.8% which is considerably higher than the current GPM of 18.1% due to a lower discount. OP will increase significantly by £355,838 which will increase OP by 105.6% and reverse the recent decline in OP.

Existing clients may feel that DGS is now competing with them or trying to cut them out. This could result in a loss of customers which could have a significant financial impact. As a minimum, it is likely to result in fewer sales via channels because some customers will switch to the website.

In terms of benefits, DGS will have more control over how its products are marketed as it will communicate with the end consumer directly. Also, customer feedback and reviews will enable DGS to improve its product offering.

In terms of risks, DGS has no experience selling direct to customers, processing card payments, logistics, or customer service. Furthermore, initial orders will be less predictable and could be subject to fluctuations or sudden increases. This will put increased pressure on the already strained production team. It could also require more inventory holding and storage is limited.

Large amounts of customer data will be gathered and processed. DGS would face fines and reputational damage if data was used illegally or without customer permission. Additionally, DGS has worked hard to build customer relationships over many years and selling DTC may cause damage to this relationship. However, clients have imposed increasingly large discounts so DGS needs to find a new route to market.

After consulting with existing clients to ensure that there will be no major losses, DGS should proceed to capitalise in the growth of e-commerce.

RECOMMENDATIONS

Ensure that data is used legally and with customer permission.
Find alternative digital marketing suppliers for comparison.
Due diligence on POM and affiliates.

APPENDIX 1: Analysis of Management Accounts 30 September 2021

		2021	2020	Change	%
		(£k)	(£k)	(£k)	
REVENUE	Vets	3249	3913	-664	-17.0%
	Pet stores	6993	6105	888	14.5%
	Other	1372	2411	-1039	-43.1%
	Taylors	4383	2952	1431	48.5%
		15997	15381	616	4.0%
	Ex Taylors	11614	12429	-815	-6.6%
Mix	Vets	20.3%	25.4%	-5.1%	
	Pet stores	43.7%	39.7%	4.0%	
	Other	8.6%	15.7%	-7.1%	
	Taylors	27.4%	19.2%	8.2%	
		100.0%	100.0%	0	
Clients	Vets	433	448	-15	-3.3%
	Pet stores	158	125	33	26.4%
	Other	107	108	-1	-0.9%
	Total	698	681	17	2.5%
Average rev per client	Vets	7.50	8.73	-1.23	-14.1%
	Pet stores	44.26	48.84	-4.58	-9.4%
	Other	12.82	22.32	-9.50	-42.6%
	Total	16.64	18.25	-1.61	-8.8%
		Total			
Revenue bridge	New clients (net)	17			
	Average rev per client - PY	18.25			
	Net client gains	**310**			
	Average rev per client - CY	16.64			
	Average rev per client - PY	18.25			
		-1.61			
	Clients - CY	698			
	Change in average revenue	**-1125**			
	CHANGE IN REVENUE	**-815**			

	Pet discount				
	RRP	10600			
	Actual	6993			
		3607			
	Av discount	34.0%			
COS	Materials	6683	6193	490	7.9%
	Labour	1728	1637	91	5.6%
	Overheads	4688	4445	243	5.5%
		13099	12275	824	6.7%
	% of revenue				
	Materials	41.8%	40.3%		
	Labour	10.8%	10.6%		
	Overheads	29.3%	28.9%		
		81.9%	76.7%		
	Materials wastage KPI	10.2%	9.7%		
	wastage	682	601	81	
GP	GP	2898	3106	-208	-6.7%
	GPM	18.1%	20.2%	-2.1%	
RECEIVABLES	Trade	1997	1686	311	18.4%
	Other	232	227	5	2.2%
		2229	1913	316	16.5%
	Days	45.6	40.0	5.6	

REVIEW OF FINANCIAL PERFORMANCE FOR YEAR ENDED 30 SEPTEMBER 2021

REVENUE

Overall revenue increased moderately by £616k (4.0%) to £15,997k which is a reasonable performance in a market which grows globally by 5% on average. The rate of growth is increasing (2020: 2.6%). Excluding Taylors, revenue has continued to decrease (£815k/6.6% decline). The number of clients has increased by 17, causing an increase in revenue of £310k. There has been a decrease in the average revenue per client of £1.61k to £16.64k, causing a decrease in revenue of £1,125k which more than offsets the impact of new clients. Revenue from Nu-Dog-Fit was £613k which was above the prediction of £570k with average revenue of £4.09 per kg below 2020 (£4.17 per kg). There has been an increase in pet ownership as people spend more time at home due to COVID-19.

Revenue from Vets decreased disappointingly by £664k (17.0%) due to the loss of VST and other clients. The number of clients has decreased by 15 and there has been a decrease in the average revenue per client of £1.23k to £7.50k. Price-based competition has increased due to concentration of clients.

Pet stores revenue increased impressively by £888k (14.5%) due to greater discounts being offered (34% v 30% in 2020). The number of clients has increased by 33 and there has been a decrease in the average revenue per client of £4.58k to £44.26k. The new younger generation of pet owners are more likely to shop online.

Other revenue decreased dramatically by £1,039k (43.1%) due to sales being primarily in person. The number of clients has decreased by 1 and there has been a decrease in average revenue per client of £9.5k to £12.82k. The downward trend is continuing (2020: 38.9% decline).

Revenue from Taylors increased impressively by £1,431k (48.5%) due to increasing online sales. Taylors receive a higher-than-average discount (40%) and extended credit terms (90 days) which has a negative impact on GPM and cash.

Vets accounts for 20.3% (2020: 25.4%) of DGS revenue, Pets stores account for 43.7% (2020: 39.7%), Other accounts for 8.6% (2020: 15.7%) and Taylors accounts for 27.4% (2020: 19.2%). This shows the increasing importance of Taylors.

COS AND GROSS PROFIT

COS increased by £824k (6.7%) due to an increase in all costs and increased faster than revenue which will have a negative impact on GPM.

Materials increased by £490k (7.9%) partly due to an increase in wastage of £81k (13.5%) which at 10.2% is above the target of 7% and 5% which is considered exceptional. Materials are now 41.8% (2020: 40.3%) of revenue.

Labour increased by £91k (5.6%) due to a 7% increase in production hours. Labour is now 10.8% (2020: 10.6%) of revenue.

Overheads increased by £243k (5.5%) due to increased production runs resulting from late changes made by large clients, new product variants and higher volumes. Overheads are now 29.3% (2020: 28.9%) of revenue.

GP decreased disappointingly by £208k (6.7%), with a GPM decrease to 18.1% from 20.2%, due to increased discounts, a revenue shift towards Taylors which has a higher discount, poor control of costs and all COS lines increasing as a percentage of revenue. The continued decline in GPM is concerning and unsustainable.

KPI ISSUE
Hugh Logan has previously complained about the commission structure and this is the second year he has had the lowest average revenue per client.

The fall in the GPM and the increase in the average discount on pet store sales shows that discounts have increased. However, increased discounts were permitted by Louis Bailey. Other factors such as Taylors accounting for a larger portion of revenue also explains the decline in GPM.

An increase in receivable days to 45.6 from 40 suggests that extended credit terms have been offered. Again, other factors such as increased sales to Taylors explains some of this.

Hugh Logan previously raised concerns that VST and PiP were not being serviced well. VST left during the year so losing PiP as well would be a significant loss for DGS.

Recommendations
Compare discounts and credit terms with parameters set by Louis Bailey.
Change KPIs so that profit and cash are considered.
Seek legal protection to prevent Hugh Logan taking PiP back to PAW.

CONCLUSIONS
Overall revenue increased moderately by £616k (4.0%) to £15,997k which is a reasonable performance in a market which grows globally by 5% on average. Revenue from Vets decreased disappointingly by £664k (17.0%) due to the loss of VST and other clients. Pet stores revenue increased impressively by £888k (14.5%) due to greater discounts being offered (34% v 30% in 2020). Other revenue decreased dramatically by £1,039k (43.1%) due to sales being primarily in person. Revenue from Taylors increased impressively by £1,431k (48.5%) due to increasing online sales.

COS increased by £824k (6.7%) due to an increase in all costs and increased faster than revenue which will have a negative impact on GPM.

GP decreased disappointingly by £208k (6.7%), with a GPM decrease to 18.1% from 20.2%, due to increased discounts, a revenue shift towards Taylors which has a higher discount, poor control of costs and all COS lines increasing as a percentage of revenue.

The fall in the GPM and the increase in the average discount on pet store sales shows that discounts have increased. However, increased discounts were permitted by Louis Bailey. Other factors such as Taylors accounting for a larger portion of revenue also explains the decline in GPM.

RECOMMENDATIONS
Further analysis of each channel/profit analysis by channel.
Revenue/profit analysis by client.
Introduce DTC sales via website to improve margins.
Win more retail clients to increase scale.
Reassess changes in discounts.
Enforce client order deadlines.
Introduce penalties for late order changes.
Invest in pigging to reduce wastage.
Continue with Nu-Dog-Fit for three more years.

APPENDIX 2: New Product Proposal

	31.12.2022	31.12.2023	TOTAL
	£000	**£000**	**£000**
Revenue	240	560	800
Materials	-170	-340	-510
Labour	-18	-36	-54
Production	-47	-94	-141
COS	-235	-470	-705
GP	5	90	95
GPM	2.1%	16.1%	11.9%
GP Yr 1	5		
GP Yr 2	90		
	95		
Average GP	47.5		
Investment (W1)	110		
ROI %	43.2%		
Investment (W1)			
Formulation	6		
Prototyping/focus groups	9		
Marketing	15		
Promotional	80		
	110		
£ per KG			
Revenue	240	560	
Volume	40	80	
£ per KG	6.00	7.00	
Discount			
RRP	£6.50	£9.00	£3.50 (53.9%)
Predicted revenue	£6.00	£7.00	
	£0.50	£2.00	
Average discount	7.7%	22.2%	
Impact on existing			
2021 Revenue	15997		
2022 addition	1.5%	240/15997	
2023 addition	3.5%	560/15997	
2021 GPM	18.1%		

Sensitivity	
Average GP	47.5
Investment (W1)	165
ROI %	28.8%
Investment + 50%	
Formulation	6
Prototyping/focus groups	9
Marketing	15
Promotional	80
	165

FINANCIAL EVALUATION OF NEW PRODUCT PROPOSAL

CONTEXT

As a result of COVID-19, it is likely that pet ownership will increase as people spend more time at home. This increases the potential market for Green Dog.

Nu-Dog-Fit's success was due to appeal to younger pet owners and Green Dog will appeal to same market as younger people account for most of the increase in people eating plant-based diets.

Previous research showed that 70% of owners look for heart health and Green Dog will advertise this benefit.

Pet owners have been reflecting their lifestyle onto pets, and this is shown by 78% of pet owners who are vegan wanting the same for their pets. Therefore, increase in vegan pet owners could increase new product sales.

RESULTS AND FINANCIAL ANALYSIS

The predicted ROI is 43.2% which is above the 25% target.

Revenue will be £240k in the first year and £560k in the second year which will add a reasonable amount to the existing business (1.5% and 3.5%).

GPM will be 2.1% in the first year and 16.1% in the second year. Both are lower than the existing GPM of 18.1%.

This appears to be a growing market so revenue and profits will likely increase beyond the forecast period. There could also be economies of scale if future volumes increase.

DGS has sufficient cash (£994k) to fund the initial costs.

ASSUMPTIONS

The calculation is based on various assumptions and the results will change if the assumptions change.

Sales volume could be higher as Nu-Dog-Fit's sales volume was 20% higher in its first year. Also, second year predicted volume looks low compared to Nu-Dog-Fit. However, Green Dog may be targeting a smaller market so volume could be lower.

The average selling price only includes a discount of 7.7% (2022) and 22.2% (2023) which is low compared to the average discount offered for existing products. Also, introductory discounts were offered when Nu-Dog-Fit was launched so these could be needed again.

The RRP increase in 2023 of £3.50 looks very high. For Nu-Dog-Fit, the increase was only £0.18.

Sales volumes and prices will be affected when the two major pet food manufacturers release their pet health food ranges in 2022. It is not clear if the impact of this has been factored in.

Costs of materials could be higher as a new supplier will be required. The recent increases in wastage will increase the cost further.

Production costs could be higher as staff will not be used to working with the new product. Also, each product requires a separate set up and flush out.

Labour costs could be higher due to price increases which have taken place in each of the last three years.

It is not clear how many variants there will be. A higher number of variants will increase production costs.

Formulation and prototyping costs are likely to be higher because formulation will not be like existing recipes which use meat and fish as the protein source.

Marketing costs are likely to be higher and they appear low compared with Nu-Dog-Fit.

Promotional costs are likely to have a higher variance as past product launches showed that when a product is different from existing portfolio costs tended to be higher.

There will be revenues from the soft launch which will reduce promotional costs. It is not clear if these have been included.

If initial investment costs are 50% higher due to it being a new recipe and different product, then ROI will still be 28.8%.

ETHICS AND BUSINESS TRUST

Green Dog is going to be marketed based on health benefits which may be contentious. Competitors are prepared to openly challenge such claims. This could lead to reputational damage for DGS. Some vets state that it is possible for dogs to get full nutrition from plant-based foods which would mitigate any damage.

When selecting a supplier, DGS needs to ensure that they can guarantee the integrity of the ingredients. Dog food is heavily regulated so DGS could be fined if there is a breach of regulations.

DGS selects suppliers based on quality and not price. Whilst the cost will impact the ROI calculation, quality should be the primary consideration.

Recent web posts have called for pet food manufacturers to be more considerate of their environmental impact. Introducing a meat free product could reduce the environmental impact.

Recommendations

Ensure that all claims can be supported.
Require potential suppliers to show evidence of source of ingredients.
Select supplier based on quality.
Use UK supplier to reduce travel miles of ingredients.

FACTORS TO CONSIDER

As two competitors will enter the market, this presents a risk as could have adverse impact on revenues/profits/cash.

However, DGS could get first mover advantage if launch product before rivals.

CONCLUSIONS

The predicted ROI is 43.2% so DGS should proceed with the soft launch as it exceeds the 25% target.

GPM will be 2.1% in the first year and 16.1% in the second year. Both are lower than the existing GPM of 18.1%.

Sales volume could be higher as Nu-Dog-Fit's sales volume was 20% higher in its first year. However, Green Dog may be targeting a smaller market so volume could be lower.

Materials costs could be higher as a new supplier will be required. The recent increases in wastage will increase the cost further.

If initial investment costs are 50% higher due to it being a new recipe and different product, then ROI will still be 28.8%.

Green Dog is going to be marketed based on health benefits which may be contentious. Competitors are prepared to openly challenge such claims. This could lead to reputational damage for DGS.

RECOMMENDATIONS

Conduct pilot testing and further research to help shape final product.
Further research on ingredients cost.
Negotiate with suppliers.
Due diligence on suppliers.
Set timetable for activities.

APPENDIX 3: Website

		30%	£63.00				
	Visitors	**CTR**	**Value (W1)**		**Costs**		**Net**
Organic	7000	2100	£132,300		-£3,800		£128,500
Paid ads	800	240	£15,120		-£18,400	£23	-£3,280
Affiliates	1400	420	£26,460		-£794	3%	£25,666
Total	**9200**	**2760**	**£173,880**		**-£22,994**		**£150,886**
		COS (W2)	-£108,192	£39.20			
		GP	**£65,688**				
		GPM	37.8%				
		Delivery	-£13,041	7.50%			
		Agency costs	-£22,994				
		Admin costs					
		OP pm	**£29,653**				
		OP pa	**£355,838**	12			
		OPM	17.1%				
	Value (W1)	**COS (W2)**					
per KG	£5.00	£2.80					
KGs	14	14					
Total	£70.00	£39.20					
10% discount	-£7.00						
	£63.00						
Impact on existing:							
2021 Revenue	£15,997						
1m Revenue	£174						
12m Revenue	£2,087						
Addition	13.0%						
2021 OPM	2.1%						
2021 OP	£337						
12m OP	£356						
Addition	105.6%						

EVALUATION OF E-COMMERCE AND POM PROPOSAL

CONTEXT

COVID-19 is likely to result in more sales being online. Having an e-commerce function enables DGS to capitalise on this.

DGS has increasingly been targeting younger pet owners and they are more likely to shop online. This project will enable DGS to reach this growing customer base directly.

POM is a digital marketing agency who has experience in increasing traffic for clients. Therefore, POM is well suited to the project.

RESULTS AND FINANCIAL BENEFITS AND RISKS

Revenue will be £2,087k per annum which will add a significant 13% to existing revenue. Revenue is likely to increase in future years as more customers become aware of the DGS website.

GPM on the website sales will be 37.8% which is considerably higher than the current GPM of 18.1% due to a lower discount.

OP will increase significantly by £355,838 which will increase OP by 105.6% and reverse the recent decline in OP.

If customers cannot purchase on credit then DTC sales will be more favourable in terms of cash than current client sales.

DGS has sufficient cash (£994k) for the initial investment of £180k.

Calculation is based on various assumptions and the result will change if the assumptions change. For example, the CTR appears high compared with the Company X project that POM worked on. POM has an incentive to overstate the CTR so that the DGS is more likely to engage POM.

The cost of paid ads exceeds revenue so would result in a loss unless CTR or value of orders increased.

Existing clients may feel that DGS is now competing with them or trying to cut them out. This could result in a loss of customers which could have a significant financial impact. As a minimum, it is likely to result in fewer sales via existing channels because some customers will switch to the website.

STRATEGIC AND OPERATIONAL BENEFITS

DGS will have more control over how its products are marketed as it will communicate with the end consumer directly.

DGS will be able to emphasise its benefits over competitors which is unlikely to happen in current channels.

Customer feedback and reviews will enable DGS to improve its product offering.

Recurring purchases will make production scheduling easier.

DGS will be less dependent on key clients such as Taylors.

STRATEGIC AND OPERATIONAL RISKS

If making direct comparisons to competitors highlights the weaknesses in their product this could result in retaliation and damage to the DGS brand.

Staff time will be needed for blog writing, newsletters, and videos. Staff may also require IT training which will incur a cost.

DGS has no experience selling direct to customers, processing card payments, logistics, or customer service.

Initially, orders will be less predictable and could be subject to fluctuations or sudden increases. This will put increased pressure on the already strained production team. It could also require more inventory holding and storage is limited.

ETHICS

Large amounts of customer data will be gathered and processed. DGS would face fines and reputational damage if data was used illegally or without customer permission.

Charlie Bailey has been promoted to a senior role despite only joining the business recently. This could cause tension among other staff if they feel that they should have been promoted before him. However, Charlie Bailey has experience in digital marketing so is well suited to the role. Also, with Stephanie Bailey stepping down, other family members need to take a greater role in the business.

DGS has worked hard to build customer relationships over many years and selling DTC may cause damage to this relationship. However, clients have imposed increasingly large discounts so DGS needs to find a new route to market.

It appears a PAW influencer has damaged the brand via her own personal actions. The project will use affiliates so DGS is exposing itself to the same risk.

Recommendations

Ensure that data is used legally and with customer permission.
Explain reasons for Charlie Bailey's appointment to other staff.
Discuss with clients and explain the pressures on DGS.
Due diligence on affiliates.

CONCLUSIONS

Revenue will be £2,087k per annum which will add a significant 13% to existing revenue. Revenue is likely to increase in future years as more customers become aware of the DGS website.

OP will increase significantly by £355,838 which will increase OP by 105.6% and reverse the recent decline in OP.

Existing clients may feel that DGS is now competing with them or trying to cut them out. This could result in a loss of customers which could have a significant financial impact. As a minimum, it is likely to result in fewer sales via channels because some customers will switch to the website.

DGS will have more control over how its products are marketed as it will communicate with the end consumer directly.

DGS has no experience selling direct to customers, processing card payments, logistics, or customer service.
Large amounts of customer data will be gathered and processed. DGS would face fines and reputational damage if data was used illegally or without customer permission.

After consulting with existing clients to ensure that there will be no major losses, DGS should proceed to capitalise in the growth of e-commerce.

RECOMMENDATIONS

Negotiate with POM.
Find alternative digital marketing suppliers for comparison.
Further research on potential sales volumes.
Discuss with sample of clients.
Due diligence on POM and affiliates.

ADVANCED LEVEL CASE STUDY EXAMINATION
NOVEMBER 2021
(4 HOURS)

ICAEW PARTNER IN LEARNING

ACA MASTERS

Case Study: Mock Exam 2

Guidance:

To obtain maximum benefit, this mock exam should be sat under full exam conditions using the Case Study CBE software which is available from the ICAEW website. You should use the exam technique taught during the 'How to Ace the ACA Case Study' class.

Once you have completed the exam, you should use the marking grids provided to calculate whether you have scored enough passing grades for each section.

In order to improve your grade, you should carefully analyse how the report has been structured and written in the prize-winner model answer.

EXHIBIT 18

EMAIL

From: Val Williams
To: Jace Moon
Subject: Draft management accounts and business developments
Date: 3 November 2021

We have just received the latest draft management accounts from DGS. We need to review these, and we also need to address two business issues facing DGS. I am attaching the following:

- Draft management accounts for the year ended 30 September 2021 **(Exhibit 19)**
- Additional information relating to the management accounts **(Exhibit 20)**
- An email from Louis Bailey to me about a new client **(Exhibit 21)**
- An email from Stephanie Bailey to me about a contamination incident **(Exhibit 22a)**, together with media coverage **(Exhibit 22b)**

Please draft for my review a report addressed to the DGS board. The report should comprise the following.

1. A review of DGS's draft management accounts for the year ended 30 September 2021 in comparison with the year ended 30 September 2020.

Your review should be based on the management accounts as set out in **Exhibit 19**. It should cover revenue, for each channel and in total; cost of sales; gross profit; distribution costs; administrative expenses; and operating profit. You should also include comments explaining why the cash balance has changed. In your review you should refer to the additional information provided in **Exhibit 20**.

2. An evaluation of the proposal from EasySave, a national grocery retailer **(Exhibit 21)**.

Using the information in **Exhibit 21,** you should calculate the operating profit for the two years starting 1 January 2022, using each of the two alternative pricing proposals. You should assess the adequacy of the assumptions and estimates. You should recommend which, if any, of the two proposals DGS should accept. You should also advise DGS on the issues arising from the plan to acquire more storage space.

3. An evaluation of the issues surrounding the contamination incident **(Exhibit 22a)**, referring also to the matters identified in **Exhibit 22b**.

You should evaluate the financial, operational and strategic impact on the overall business, including any business trust and ethical issues. You should provide appropriate calculations to support your evaluation.

EXHIBIT 19

DGS: Draft management accounts for the year ended 30 September 2021

Statement of profit and loss for the year ended 30 September 2021

	£000
Revenue (Note 1)	16,653
Cost of sales (Note 2)	(13,207)
Gross profit	**3,446**
Distribution costs	(1,354)
Administrative expenses	(1,348)
Operating profit	**744**
Net finance expense	(105)
Profit before taxation	639
Income tax	(121)
Profit for the year	**518**

Statement of financial position as at 30 September 2021

	£000
Non-current assets	
Property, plant and equipment (PPE) (Note 3)	1,931
	1,931
Current assets	
Inventories (Note 4)	1,900
Trade and other receivables (Note 5)	2,216
Cash and cash equivalents	536
	4,652
TOTAL ASSETS	**6,583**
Equity	
Ordinary shares	5
Retained earnings	3,580
	3,585
Non-current liabilities	
5% bank loan (Note 6)	2,100
Current liabilities	
Trade and other payables (Note 7)	777
Taxation	121
	2,998
TOTAL EQUITY AND LIABILITIES	**6,853**

Statement of cash flows for year ended 30 September 2021

	£000
Cash flows from operating activities	
Profit before taxation	639
Adjustments for:	
Depreciation	341
Loss on disposal of PPE	252
Finance expense	105
	1,337
Change in inventories	(277)
Change in trade and other receivables	(303)
Change in trade and other payables	(116)
	641
Income tax paid	(95)
Net cash generated from operating activities	**546**
Investing activities	
Acquisition of PPE	(42)
Proceeds from disposal of PPE	8
Net cash generated from investing activities	**(34)**
Financing activities	
Interest paid	(105)
Dividends paid	(1,200)
Cash flows used financing activities	**(1,305)**
Net change in cash and cash equivalents	(793)
Cash and cash equivalents at start of period	1,329
Cash and cash equivalents at end of period	**536**

Notes to the management accounts

Note 1: Revenue by channel

	£000
Veterinary practices	4,002
Specialist pet stores	6,402
Other	2,481
Food retailers	3,768
	16,653

Note 2: Cost of sales by category

	£000
Materials	6,498
Production labour	2,021
Production overheads	4,688
	13,207

Note 3: PPE

	£000
Cost	
1 October 2020	5,788
Additions	42
Disposals	(309)
30 September 2021	5,521
Depreciation	
1 October 2020	3,298
Charge for year	341
On disposals	(49)
30 September 2021	3,590
Carrying amount	
30 September 2021	**1,931**

Note 4: Inventories

	£000
Packaging and consumables	396
Raw materials	809
Finished goods	695
	1,900

Inventories are carried at the lower of cost and net realisable value.

Note 5: Trade and other receivables

	£000
Trade receivables	1,987
Other receivables and prepayments	229
	2,216

Note 6: 5% bank loan

The loan is secured on land included in PPE. The interest on the loan is at a fixed rate of 5% and payable annually in arrears. The loan is repayable in 2030 and carries an early redemption penalty.

Note 7: Trade and other payables

	£000
Trade payables	432
Other payables	345
	777

EXHIBIT 20

Note from Preet Sharma, 23 October 2021: Additional information relating to the draft management accounts for the year ended 30 September 2021

This note is set in the context of industry data showing that, in the 12 months to 30 September 2021, sales of pet food in the UK increased by 4.2%.

The following issues are reflected in the management accounts.

- In April 2021, we signed supply agreements with two national grocery retailers and both began stocking DGS products from July 2021. As a result, the management accounts now show food retailers as a separate channel. We continue to exclude this channel from average revenue per client due to its distortive effect. Revenue from Taylors was £3,408k.

- Changes were made to the Sales and Business Development team so that each team member now has responsibility for a particular channel. The assessment of individual performance is still based on the same sales KPIs. Data relating to 2021 is as follows:

Team member	Revenue Target	Actual revenue	Clients	Average revenue per client	Channel
	£000	£000	Number	£000	
Hugh Logan	4,800	6,402	128	50.02	Specialist pet stores
Suzanne Coder	4,800	4,002	471	8.50	Veterinary practices
Sayali Patel	4,800	2,481	119	20.85	Other
	14,400	**12,885**	**718**	**17.95**	
Charlie Bailey	3,768	n/a	3		Food Retailers

- Pets in Paradise (PiP) reported record growth for its most recent financial year and attributed this to an increase in online sales.

- In January 2021, we took the decision to target smaller clients and this resulted in the recruitment of smaller independent vet practices, dog breeders and dog groomers.

- Following minor supply disruption in August 2021, we found a new supplier to provide the same quality ingredients at a lower cost. We settled outstanding balances with our previous suppliers.

- Staff were required to work overtime at several points during the year in order to cope with additional volumes and frequent equipment breakdowns. Temporary staff were also brought in to help.

- The materials wastage KPI was 8.8%.

- At the most recent board meeting, the directors questioned why there has been such a significant decline in the cash balance when profits have increased and capital expenditure has been reduced.

EXHIBIT 21

EMAIL

From: Louis Bailey
To: Val Williams
Subject: EasySave
Date: 26 October 2021

As part of our shift towards more mainstream food retailers, we have entered discussions with the budget supermarket chain EasySave. This would be a significant client addition for DGS as it would greatly enhance the scope of our route to market.

Following rapid expansion in recent years, EasySave now have 220 medium sized stores located throughout the UK. EasySave sells a range of cheap to average priced pet food; most of the products are from relatively unknown brands. EasySave spends little on advertising and instead focusses on keeping prices low. EasySave does not make sales via its website.

EasySave have put forward two alternative proposals:

(1) 50% discount on RRP
(2) 30% discount on RRP

Assumptions for the two years starting 1 January 2022

Assumptions regarding sales volumes and average sales value are based on estimates provided by EasySave. Assumptions regarding costs are based on DGS board discussions.

50% discount

1. Average RRP of products sold will be £4.00 per kg. In the first year (to 31 December 2022), 750 tonnes will be sold. In the second year (to 31 December 2023), 1,650 tonnes will be sold.

2. The average cost of materials will be £1.00 per kg. In the first year, 765 tonnes will be purchased to produce the required 750 tonnes. In the second year, 1,700 tonnes will be purchased to produce the required 1,650 tonnes. The difference between the volume purchased and the volume produced is due to expected wastage.

3. Labour costs will be £150,000 in the first year and £365,000 in the second year.

4. Production overheads will be £300,000 in the first year and £660,000 in the second year.

5. Distribution costs are expected to be 7.5% of revenue. A replenishment delivery will be made once every two weeks.

6. Payment will be made 60 days after delivery.

30% discount

1. Average RRP of products sold will be £4.00 per kg. In the first year (to 31 December 2022), 250 tonnes will be sold. In the second year (to 31 December 2023), 550 tonnes will be sold.

2. The average cost of materials will be £1.00 per kg. In the first year, 255 tonnes will be purchased to produce the required 250 tonnes. In the second year, 560 tonnes will be purchased to produce the required 550 tonnes. As above, the difference is due to expected wastage.

3. Labour costs will be £100,000 in the first year and £230,000 in the second year.

4. Production overheads will be £175,000 in the first year and £385,000 in the second year.

5. Distribution costs are expected to be 7.5% of revenue. A replenishment delivery will be made once a month.

6. Payment will be made 90 days after delivery.

New storage facility

With the recent increase in sales volumes and the potential recruitment of other large clients, we plan to acquire more space for storage. A suitable location very close to our existing site has been identified. The site will be used to store inventory and will increase storage capacity by 40%. There will be no changes to activities at our existing site. The new site is expected to cost £280,000.

EasySave marches on (Retail Week, May 2021)

Grocery discounter EasySave continues to expand its foothold in the UK grocery market as its strategy of undercutting competitors on price appears to be working. As of January 2021, EasySave had 208 stores in the UK with plans to open another 15 this year.

EasySave's rise to power has come from its ability to purchase large quantities from suppliers in order to reduce the average cost of each unit. These cost savings can then be passed on to customers in the form of lower prices. The supermarket offers a 'no-frills' service: there is no online ordering, no home delivery and no instore facilities.

In uncertain and challenging times, consumers are eager to save wherever they can. This has led them through the doors of EasySave.

EXHIBIT 22a

EMAIL

From: Stephanie Bailey
To: Val Williams
Subject: Contamination incident
Date: 2 November 2021

A very serious incident has arisen which we need to deal with as a matter of urgency. One of our clients, a regional veterinary practice, informed us last week that several of their customers have complained that their dogs have become ill after consuming one our most popular products, Nutri-Pup. Nutri-Pup contains beef and is designed for puppies.

Having reviewed our dispatch records, we were able to identify the production batch that produced the items in question. Following testing, it has now been confirmed that a particularly harmful strain of E. coli was present in the sample. To make matters worse, it has been confirmed that this strain is particularly harmful to puppies.

Ade John has conducted an initial investigation into the affected batch and has traced its production back to July 2021. July was a very busy period for the business as we received lots of orders from large clients (including several last-minute changes), as well as starting to supply two new grocery retail clients. This put the production teams under a great deal of pressure to meet client order deadlines and whilst we increased overtime and brought in lots of temporary staff to help, it appears as though not all safety procedures were followed. Unfortunately, it has not been possible to speak with the shift supervisor who was responsible for the batch because he is signed off sick due to work-related stress.

Given the severity of the issue, we have put together a crisis team consisting of myself, Ade, William Bailey and Louis Bailey. We have agreed the following action plan:

1. Identify the extent of the issue and affected clients.
2. Contact all affected clients explaining the issue.
3. Prepare a product recall notification for clients to communicate to their customers.
4. Include a notification on the DGS website informing pet owners of the issue.
5. Provide a full refund for affected purchases.
6. Cover all costs relating to retrieval of the products and transport back to DGS premises.
7. Destroy any potentially contaminated products, including those still held in inventory.
8. Engage a PR consultancy to help mitigate the damage to the DGS brand.

Based on internal records, we have been able to identify the following:

- Products produced between June and September could be contaminated.
- The products have been supplied to 40 different clients, including some of our largest clients (Taylors, The Veterinary Support Trust and Pets in Paradise).
- The average volume supplied to each client during this period was 5 tonnes.
- The average revenue earned was £3.75 per kg (after discounts).
- Inventory with a cost of £250k could potentially be contaminated.

As part of the agreed action plan, the following costs are expected to be incurred:

- Collection and transport of contaminated products: £120k
- Secure destruction of contaminated products: £50k
- PR consultancy: £80k
- Legal advice: £50k

To help mitigate the impact on the DGS brand, we have engaged Butterfly, a PR consultancy who specialise in product recalls and brand recovery. Butterfly have advised that we do not contact any clients until the exact source and cause of the contamination has been identified. Butterfly suggested that we should explore the possibility of a supplier being to blame as this would help reduce the impact on DGS. Also, Butterfly have advised that we should not publish a notification on the DGS website as it is our clients who sold the goods to pet owners and therefore our clients are responsible for informing pet owners.

EXHIBIT 22b

RECENT MEDIA COVERAGE

The real cost of a product recall (Brand Marketing Journal, July 2021)

Product recalls are increasing in size and number. This is partly due to the increasing length and complexity of supply chains, as well as increasing regulation. As many businesses have discovered in recent years, the true costs of a product recall are not always immediately apparent.

Companies who recall faulty or dangerous products incur initial costs of identifying the affected items, communicating the issue to customers, and collecting and disposing of the goods. However, this is just the beginning of the nightmare. Legal fees and fines arising from subsequent regulatory investigations can quickly turn a profitable business to a loss making one.

Furthermore, the adverse publicity surrounding a product recall can do permanent damage to a brand. A recent survey found that 32% of customers will never purchase the product in question again and 23% will never purchase from the supplying brand again. It is this permanent loss of custom which has caused so many businesses to fail following a major product recall.

Taylors takes no prisoners (Retail Gazette, January 2021)

The upmarket supermarket chain Taylors have announced that they have ceased all purchases from Robath & Co, a supplier of dairy products. This is following a product recall where it was suspected that some of Robath & Co's products may have contained a pathogen harmful to human health. A spokesperson for Taylors said "Our customers take their health seriously, so we take our customers' health seriously. As a result, we will no longer stock any products from Robath & Co".

Mock Exam 2 Mark Scheme

	OVERALL ASSESSMENT CRITERIA	EXECUTIVE SUMMARY R1 - Review of financial performance
	• Appropriate layout: headings AND paragraphs/sentences • Appropriate disclaimer AND report from firm • Suitable language: formal AND tactful AND ethical • Reasonable spelling and grammar	• Total revenue: qualitative comment **with fig** • Channel revenue: qualitative comment **with fig** • COS/GP/GP%: qualitative comment **with fig** • Dist/admin/OP/OP%: qualitative comment **with fig**
	NA ID IC SC CC	**NA ID IC SC CC**
		• Cash: decline caused by inventory/receivables/payables/dividend • GP/GP%/OP/OP%: small improvement / reverses declining trend • Focus on growing food retailer channel / invest in new PPE • Appropriate summary of report section
	NA ID IC SC CC	**NA ID IC SC CC**

R2 - Evaluation of EasySave proposal	R3 - Evaluation of contamination issue
• Gives OP for option 1 AND option 2 **with fig** • Evaluates assumptions • Option 1 higher in absolute terms / option 2 higher margins • Concludes on storage issues	• Calculates financial impact with fig • Concludes on main operational impact • Concludes on main strategic impact • Impact could cause DGS to go out of business / loss for 30 September 2022 likely
NA ID IC SC CC	**NA ID IC SC CC**
• Concludes on way forward • EasySave not consistent with current strategy • DD/ negotiate with EasySave / find more suitable clients • Appropriate summary of report section	• Ade Jones raised concerns previously / control improvements needed • DGS has a responsibility for staff/pet health • Do not delay in contacting clients / proceed with crisis team action plan • Appropriate summary of report section
NA ID IC SC CC	**NA ID IC SC CC**

REQUIREMENT 1 – Review of financial performance

ASSIMILATING & USING INFORMATION	STRUCTURING PROBLEMS & SOLUTIONS
Appendix 1 • Presents 2021 figures • Presents 2020 figures • Analysis of revenue by channel • Analysis of COS AND distribution/admin	**Financial analysis: revenue (report)** • Vets: increase due to smaller independent vet practices • Pet stores: up due to PiP online growth • Other: up due to smaller clients • Food retailers: up due to new clients (£360k) / Taylors growth (£456k) • Clients: up 37/5.4% / av. revenue down £0.13k/1.7% • Mix: Vets (24.0% v 25.4%) / Pet (38.4% v 39.7%) / Other (14.9% v 15.7%) / Food (22.6% v 19.2%)
NA ID IC SC CC	**NA ID IC SC CC**
AI/CS Exam info (report/appendix) • Overall revenue: up £1,272k / 8.3% • Vets: up £89k / up 2.3% • Pet stores: up £297k / up 4.9% • Other: up £70k / up 2.9% • Food retailers: up £816k / up 27.6%	**Financial analysis: COS/GP (report)** • Overall COS: up £932k / 7.6% • Materials: up £305k / 4.9% / 39.0% rev > • Labour: up £384k / 23.5% / 12.1% rev > • Production: £243k / 5.5% / 28.2% rev > • GP: up £340k / 10.9% / GP% up 20.7% v 20.2% >
NA ID IC SC CC	**NA ID IC SC CC**
Business issues / wider context • Impact of COVID-19 on business / economic downturn • Ind trends: increase in pet ownership / demand for specialised pet food / pets pampered • Ind: UK pet food market growth 4.2% / DGS has small share of market / £1.5bn • Online sales via supermarkets and pet stores increasing • Price-based competition due to concentration • Shift towards mainstream retailers	**Analysis: Dist/Admin/OP/Cash (report)** • Distribution: up £207k / 18.0% / 8.1% rev • Admin: down £6k / 0.4% / 8.1% rev • Overall OP: up £139k / 23.0% Overall OP%: up 4.5% v 3.9% • Cash: £536k / down £793k/59.7% • Receivables: £303k / Inventory: £277k / Payables: £116k • PPE: £42k Dividend: £1,200k
NA ID IC SC CC	**NA ID IC SC CC**

REQUIREMENT 1 – Review of financial performance

APPLYING JUDGEMENT	CONCLUSIONS AND RECOMMENDATIONS
Evaluation of revenue analysis • Total revenue: up (8.3%) v growth last year (2.6%) • Below target **again** / comparison to industry growth • More customers mitigate risk / lower av. revenue per client • New clients not full year of revenue / next year will see full benefit / likely to increase • Client gains (£675k) more than offset av. revenue decline (£219k) • KPI: comment on individual performance / HL benefitted from change / targets unfair	**Draws conclusions (under a heading)** • Total revenue: qualitative comment **with fig** • Channel revenue: qualitative comment **with fig** • COS/GP/GP%: qualitative comment **with fig** • Dist/admin/OP/OP%: qualitative comment **with fig** • Cash: qualitative comment **with fig**
NA ID IC SC CC	**NA ID IC SC CC**
Evaluation of COS/GP • Compares COS/increase in GP to revenue • Materials: new supplier / higher volumes / wastage down £29k/4.9% / 8.8% is above target/improving • Labour: equipment lacks modern technology/ overtime/temp staff / staff morale impact • Production: well controlled despite higher volumes/new clients/ lower depreciation as fewer PPE additions • GP/GP%: materials/production decreasing as % of revenue GP% increase despite more food retailers	**Makes recommendations** • Further analysis by channel / further cost analysis • Include food retailers in KPI targets • Focus on growing food retailer channel • Invest in new PPE • Invest in pigging to reduce wastage • Other commercial recommendations
NA ID IC SC CC	**NA ID IC SC CC**
Evaluation of Dist/Admin/OP/Cash • Distribution: higher % of revenue suggests inefficiencies/ increased number of clients results in more deliveries • Admin: well controlled / costs spread over greater output / fixed costs • OP%: reverses declining trend / GP benefits flows through to OP • Cash generated from operations positive / additional finance could be needed • Receivables: increase due to food retailers / Payables: new suppliers / settlement of old suppliers Inventory: smaller clients fulfilled from inventory • PPE investment decline contributing to breakdowns / Dividend: increase when business needs investment	
NA ID IC SC CC	**NA ID IC SC CC**

REQUIREMENT 2 – Evaluation of new client proposal

ASSIMILATING & USING INFORMATION	STRUCTURING PROBLEMS & SOLUTIONS
Appendix 2 • Numbers labelled AND clearly derived • Calculation of 2022 OP • Calculation of 2023 OP • Calculation for both options	**Calc of profit - Option 1 (appx or report)** • Revenue: £1,500k + £3,300k / £4,800k • GP: £285k + £575k / £860k • Dist: £112.5k + £247.5k / £360k OR own fig eg 2021 % rev • OP: £172.5k + £327.5k / £500k OR own fig using own dist costs number • Calculates GPM / OPM
NA ID IC SC CC	**NA ID IC SC CC**
AI/CSE information (report/appendix) • RRP: £4 per kg • Discount: 50% AND 30% • Materials: £1 per kg • Labour: £150k + £365k AND £100k + £230k • Overheads: £300k + £660k AND £175k + £385k	**Calc of profit - Option 2 (appx or report)** • Revenue: £700k + £1,540k / £2,240k • GP: £170k + £365k / £535k • Dist: £52.5k + £115.5k / £168k OR own fig eg 2021 % rev • OP: £117.5k + £249.5k / £367k OR own fig using own dist costs number • Calculates GPM / OPM
NA ID IC SC CC	**NA ID IC SC CC**
Business issues / wider context • Impact of COVID-19 on the business • EasySave: no online sales / budget strategy expanding / cost leader not differentiator • Limited opportunity to expand current storage facilities • Strategy: win new clients without sacrificing margin via discounts / mainstream food retailers / discounts based on predicted size of orders/exclusivity • 2021: two new clients / Taylors growth / growing channel • Bank balance £536k at year end	**Assumptions** • Revenue: actual volumes may be lower > • Revenue: year 2 growth could be higher > • Materials: could be economies of scale from larger volume • Labour/production: wage increases / more pressure on staff • May be extra costs eg admin, management time • Distribution: could be higher fortnightly replenishment / large clients have monthly replenishment / 2021 increase in % rev
NA ID IC SC CC	**NA ID IC SC CC**

REQUIREMENT 2 – Evaluation of new client proposal

APPLYING JUDGEMENT	CONCLUSIONS AND RECOMMENDATIONS
Evaluation of calculations • Changes in assumptions will impact calculations • Revenue: option 1 higher • GP: option 1 higher / GPM: option 2 higher OR OP: option 1 higher / OPM: option 2 higher • Compares revenue/GP/GPM/OP/OPM to 2021 • Cash: option 1 payment terms favourable / compares to current balance / may require additional finance • 50% discount is high v existing eg Taylors 40%	**Draws conclusions (under a heading)** • Gives OP for option 1 AND option 2 **with fig** • Evaluates/questions assumptions • Concludes on storage issues • Concludes on way forward
NA ID IC SC CC	**NA ID IC SC CC**
Evaluation of new storage facility • On-site storage is currently limited / extra 40% significant • Expansion in the business will require additional storage • Buying in larger quantities could reduce cost • Consideration of funding / additional staff / other costs • New storage site works logistically because of location • Increase in smaller clients who are supplied from inventory	**Makes recommendations** • Negotiate with EasySave / min order quantity • Further research to assess costs / likely volumes • Non-disclosure agreement re discounts • Due diligence on EasySave / find other clients • Discuss storage funding with bank / identify other costs • Other commercial recommendations
NA ID IC SC CC	**NA ID IC SC CC**
Evaluation of assumptions • Compares with new clients/Taylors • Compares with Taylors growth eg 240% • EasySave: incentive to inflate volumes to increase attractiveness of proposal • Wastage appears low / compares with 2021 wastage • Existing issues with production / late orders / capacity issues / equipment breakdowns • Low-cost supermarket not consistent with DGS brand / customer base / sells cheap brands	
NA ID IC SC CC	**NA ID IC SC CC**

REQUIREMENT 3 – Evaluation of product contamination incident

ASSIMILATING & USING INFORMATION	STRUCTURING PROBLEMS & SOLUTIONS
Workings / report • Numbers labelled AND clearly derived • Calculation of recall costs • Calculation of client refunds • Uses £3.75 + 5 tonnes + 40 clients • Considers other costs not identified	**Financial calculations (appx or report)** • Client refunds: £750k • Distribution costs: £120k • Inventory write-off: £250k • Storage and destruction: £50k • PR costs: £80k • Legal costs: £50k
NA ID IC SC CC	**NA ID IC SC CC**
Business issues • DGS has never had product recall • Ade John previously raised concerns several times • Previous contamination incident / identified via sampling before dispatch • Pigging was proposed as potential solution / sales team management of clients a contributing factor	**Operational and strategic impact** • Will damage DGS brand > • Competitors may seek to capitalise > • Loss of clients likely / impact on attracting new clients • Use of untrained temporary staff / staff pressured and stressed / labour changes needed • Impact on staff motivation / conflict/tension between sales and production teams • Other products may be affected
NA ID IC SC CC	**NA ID IC SC CC**
Wider context • Impact of COVID-19 on the business • Taylors ceased stocking previous supplier products following recall • Healthiness of dog food a key purchasing factor / DGS natural ingredients/health focus • Pressures on production teams / temporary staff/overtime /equipment failures • KPIs changed in 2021 • Bank balance £536k at year end	**Comments on ethical/bus trust issues** • Butterfly suggestion that DGS does not have obligation to inform pet owners > • Supervisor off work with stress > • Previous warnings from Ade John appear to have been ignored > • Butterfly advice to delay action > • 23% / 32% of clients will not purchase again > • Butterfly suggestion to blame supplier >
NA ID IC SC CC	**NA ID IC SC CC**

REQUIREMENT 3 – Evaluation of product contamination incident

APPLYING JUDGEMENT	CONCLUSIONS AND RECOMMENDATIONS
Evaluation of financial impact • Any changes in assumptions will impact calculations • Calculates impact on profit/cash **with fig** • Likely to result in loss for ye 30 September 2022 • Considers financial impact of lost clients • Funding required to cover costs • Effects will last years / could cause business to fail	**Draws conclusions (under a heading)** • Calculates financial impact **with fig** • Concludes on main **operational impact** • Concludes on main **strategic impact** • Concludes on ethics/business trust issues
NA ID IC SC CC	**NA ID IC SC CC**
Evaluation of operational/strategic impact • PR may help mitigate / brand built on quality/health • Competitors prepared to comment on other brands / could use this to dispute DGS health claims • Could result in lost revenue from all channels • Quality control procedures prior to dispatch should have identified issue / procedures not followed / process changes needed • Dog food is heavily regulated so could be fines • Additional costs e.g. management time, brand repair	**Makes recommendations** • Identify cause of contamination • Implement stricter control procedures / staff training • Arrange finance for recall costs / find alternative PR firm • Communicate issue with clients / staff • Set timetable for activities • Other commercial recommendations
NA ID IC SC CC	**NA ID IC SC CC**
Evaluation/recs: ethical/business trust • Pet health at risk / post on website further damage to brand/client relationships • DGS responsibility for staff welfare / assign board member HR responsibility • Take future warnings seriously / maintain risk register and ensure acted upon • Delays could cause further harm to pets / identifying source will take time • Communicate openly and set out steps that will be taken to improve • Identify if supplier is responsible / unfair to blame unless certain / DGS should have identified contamination	
NA ID IC SC CC	**NA ID IC SC CC**

Mock Exam 2 Model Answer

A report on Dog Gourmet Supplies (DGS) Limited

TO: Directors of DGS Limited

FROM: Oakley Dunstable

DATE: 3 November 2021

This report is for the Board of DGS Limited only and should not be distributed to third parties.

No liability can be accepted in this event.

Executive Summary

REVIEW OF FINANCIAL PERFORMANCE FOR YEAR ENDED 30 SEPTEMBER 2021

Overall revenue increased impressively by £1,272kk (8.3%) to £16,653k which is a strong performance in a market which grew by 4.2%. However, revenue is below target (£18,168k/£14,400k) again. The number of clients has increased by 37, causing an increase in revenue of £675k. There has been a decrease in the average revenue per client of £0.31k to £17.95k causing a decrease in revenue of £219k, but this is more than offset by the new client gains.

Revenue from Vets increased moderately by £89k (2.3%) due to the recruitment of smaller independent practices. Pet stores revenue increased impressively by £297k (4.9%) due to an increase in online sales at PiP. Other revenue increased reasonably by £70k (2.9%) due to the acquisition of dog breeders and groomers. Revenue from food retailers increased impressively by £816k (27.6%) due to the addition of two new clients in July 2021.

COS increased by £932k (7.6%) due to an increase in all costs. Concerningly, labour increased by £384k (23.5%) due to overtime and temporary staff required as a result of increased volumes and equipment breakdowns. GP increased impressively by £340k (10.9%), with a slight GPM increase to 20.7% from 20.2%, despite a revenue shift towards food retailers who receive a higher discount.

Distribution costs increased by £207k (18.0%) due to a greater number of clients as this may require more deliveries. Admin costs decreased slightly by £6k (0.4%) due to costs being well controlled. OP has increased impressively by £139k (23.0%) to £744k, with an OPM increase to 4.5% (2020: 3.9%). Encouragingly, OPM has started to recover from the recent decline.

Cash has decreased by £793k (59.7%) to £536k due to adverse movements in all working capital balances. The dividend paid of £1,200k was much larger than previous years (£500k) and cash would have increased had it not been paid.

RECOMMENDATIONS

Win more retail clients to increase scale.
Include food retailers in KPI measures.
Invest in new PPE.

**highlighted text demonstrates key points to bring to the attention of the directors. These were not included in the conclusions and were added to the Executive Summary.*

FINANCIAL EVALUATION OF EASYSAVE PROPOSAL

Under option 1, operating profit will be £172.5k in 2022 (OPM: 11.5%), £327.5k in 2023 (OPM: 9.9%), giving a total of £500k. Under option 2, operating profit will be £117.5k in 2022 (OPM: 16.8%), £249.5k in 2023 (OPM: 16.2%), giving a total of £367k.

Option 1 has higher revenue and profit in absolute terms. However, because of the larger discount (50% v 30%), OPM is lower for option 1 compared with option 2. As sales will be made on credit, additional funding may be required as the current cash balance (£536k) is lower than the costs to produce and distribute.

Regarding revenue, volumes could be lower because they are based on estimates by EasySave who may be biased to make the proposal appear more attractive. Also, DGS products will be competing with cheaper brands which will make DGS products less attractive to EasySave's budget conscious shoppers. Revenue appears optimistic compared with revenue generated from Taylors in the first year given that Taylors (250 large stores and 650 smaller stores) is much larger than EasySave. In terms of costs, wastage is likely to be higher because it appears very low compared with 2021 levels (8.8%). The assumptions seem to suggest that wastage will be lower than the 5% exceptional level.

Current storage is limited and DGS will need space to hold more inventories as the business expands. Additional storage equipment and staff will be required which will increase the cost.

DGS should not proceed with the EasySave proposal because selling via EasySave is not consistent with the differentiation strategy pursued by DGS.

RECOMMENDATIONS

Find other upmarket retail clients.
Further research on storage facility costs.
Discuss funding with bank.

EVALUATION OF CONTAMINATION INCIDENT

The incident will result in additional costs of £1,300k. OP for 2021 was only £744k so the incident is likely to result in DGS making a loss in the year ended 30 September 2022. Also, DGS does not have sufficient cash (£536k) to cover the costs and refunds so additional funding may be needed.

Strategically, DGS is likely to lose clients when they become aware of the incident, particularly Taylors who has stopped purchasing from another supplier due to a similar issue. The loss of Taylors will add to the financial impact and could cause DGS to go out of business.

Operationally, it appears current controls are not operating so will need to be improved. The use of temporary staff and overtime appears to have been a contributing factor as staff did not follow control procedures. This could have resulted in other incidents and changes are needed to labour management.

Butterfly has suggested that DGS should not contact clients yet. The contaminated products pose a health threat so any delay could result in harm to pets. The supervisor has been off work with stress and Ade Jones previously reported staff stress as an issue. DGS has a responsibility for the mental health of its workforce and should not place staff under excessive pressure.

DGS should continue with the action plan proposed by the crisis team and prioritise pet safety.

RECOMMENDATIONS

DGS should not delay in contacting clients if pets at risk.
Investigation into cause of contamination.
Implement stricter control procedures.

APPENDIX 1: Analysis of Management Accounts 30 September 2021

		2021	2020	Change	%
		£k	£k	£k	
REVENUE	Vets	4002	3913	89	2.3%
	Pet stores	6402	6105	297	4.9%
	Other	2481	2411	70	2.9%
	Food retailers	3768	2952	816	27.6%
		16653	15381	1272	8.3%
	Ex Food retailers	12885	12429	456	3.7%
Mix	Vets	24.0%	25.4%	-1.4%	
	Pet stores	38.4%	39.7%	-1.2%	
	Other	14.9%	15.7%	-0.8%	
	Food retailers	22.6%	19.2%	3.4%	
		100.0%	100.0%	0.0%	
Clients	Vets	471	448	23	5.1%
	Pet stores	128	125	3	2.4%
	Other	119	108	11	10.2%
	Total	718	681	37	5.4%
Average rev per client	Vets	8.50	8.73	-0.24	-2.7%
	Pet stores	50.02	48.84	1.18	2.4%
	Other	20.85	22.32	-1.48	-6.6%
	Total	17.95	18.25	-0.31	-1.7%
		Total			
Revenue bridge	New clients (net)	37			
	Average rev per client - PY	18.25			
	Net client gains	**675**			
	Average rev per client - CY	17.95			
	Average rev per client - PY	18.25			
		-0.31			
	Clients - CY	718			
	Change in average revenue	**-219**			
	CHANGE IN REVENUE	**456**			
	check	*456*			
Food retailers	Total	3768	2952	816	27.6%
	New (3m)	360	0	360	
	Taylors	3408	2952	456	15.4%

COS	Materials	6498	6193	305	4.9%
	Labour	2021	1637	384	23.5%
	Overheads	4688	4445	243	5.5%
		13207	12275	932	7.6%
	% of revenue				
	Materials	39.0%	40.3%		
	Labour	12.1%	10.6%		
	Overheads	28.2%	28.9%		
		79.3%	79.8%		
	Materials wastage KPI	8.8%	9.7%		
	wastage	572	601	-29	-4.8%
GP	GP	3446	3106	340	10.9%
	GPM	20.7%	20.2%	0.5%	
DISTRIBUTION		1354	1147	207	18.0%
% of revenue		8.1%	7.5%		
ADMIN		1348	1354	-6	-0.4%
% of revenue		8.1%	8.8%		
OP	OP	744	605	139	23.0%
	OPM	4.5%	3.9%	0.5%	
CASH		£536	1329	-793	-59.7%
INVENTORIES	Packaging/consumables	396	355	41	11.5%
	Raw materials	809	733	76	10.4%
	Finished goods	695	535	160	29.9%
		1900	1623	277	17.1%
	Days	52.5	48.3	4.2	
RECEIVABLES	Trade	1987	1686	301	17.9%
	Other	229	227	2	0.9%
		2216	1913	303	15.8%
	Days	43.6	40.0	3.5	
PAYABLES	Trade	432	545	-113	-20.7%
	Other	345	348	-3	-0.9%
		777	893	-116	-13.0%

REVIEW OF FINANCIAL PERFORMANCE FOR YEAR ENDED 30 SEPTEMBER 2021

REVENUE

Overall revenue increased impressively by £1,272k (8.3%) to £16,653k which is a strong performance in a market which grew by 4.2%. The rate of growth is increasing (2020: 2.6%). All channels have seen an increase in revenue. Excluding food retailers, revenue increased (£456k/3.7%). Revenue is below target (£18,168k/£14,400k) again. The number of clients has increased by 37, causing an increase in revenue of £675k. There has been a decrease in the average revenue per client of £0.31k to £17.95k causing a decrease in revenue of £219k, this is more than offset by the new client gains. There has been an increase in pet ownership as people spend more time at home due to COVID-19.

Revenue from Vets increased moderately by £89k (2.3%) due to the recruitment of smaller independent practices. The number of clients has increased by 23 and there has been a decrease in the average revenue per client of £0.24k to £8.50k. Price-based competition has increased due to concentration of clients.

Pet stores revenue increased impressively by £297k (4.9%) due to an increase in online sales at PiP. The number of clients has increased by 3 and there has been an increase in the average revenue per client of £1.18k to £50.02k. Pet stores have a higher average revenue per client so Hugh Logan benefits from the change in client allocation. The new younger generation of pet owners are more likely to shop online.

Other revenue increased reasonably by £70k (2.9%) due to the acquisition of dog breeders and groomers. The number of clients has increased by 11 and there has been a decrease in the average revenue per client of £1.48k to £20.85k. The downward trend has reversed (2020: 38.9% decline).

Revenue from food retailers increased impressively by £816k (27.6%) due to the addition of two new clients in July 2021. The new clients added £360k to revenue and Taylors added £456k. The new clients were acquired part way through the year so the full benefit will be realised in future years. If, like Taylors, the clients receive a higher-than-average discount (40%) and extended credit terms (90 days), this will have a negative impact on GPM and cash.

Vets accounts for 24.0% (2020: 25.4%) of DGS revenue, Pets stores account for 38.4% (2020: 39.7%), Other accounts for 14.9% (2020: 15.7%) and food retailers account for 22.6% (2020: 19.2%). This shows the increasing importance of food retailers and the strategy to shift towards mainstream food retailers.

COS AND GROSS PROFIT

COS increased by £932k (7.6%) due to an increase in all costs. Other than labour, they increased slower than revenue which will have a positive impact on GPM.

Materials increased by £305k (4.9%) due to increased volumes but is lower than the increase in revenue because of the new cheaper supplier. Wastage has decreased by £29k (4.9%) but is 8.8% which is above the target of 7% and 5% which is considered exceptional. Materials are now 39.0% (2020: 40.3%) of revenue.

Labour increased by £384k (23.5%) due to overtime and temporary staff required as a result of increased volumes and equipment breakdowns. Labour is now 12.1% (2020: 10.6%) of revenue.

Overheads increased by £243k (5.5%) which appear well controlled given the increase in volume, new clients and equipment breakdowns. Overheads are now 28.2% (2020: 28.9%) of revenue.

GP increased impressively by £340k (10.9%), with a slight GPM increase to 20.7% from 20.2%, despite a revenue shift towards food retailers who receive a higher discount. This has stabilised GPM after the recent decline.

OPERATING PROFIT
Distribution costs increased by £207k (18.0%) due to a greater number of clients as this may require more deliveries. They now account for 8.1% (2020: 7.5%) of revenue and this increase will reduce OPM.

Admin costs decreased slightly by £6k (0.4%) due to costs being well controlled. They now account for 8.1% (2020: 8.8%) of revenue.

OP has increased impressively by £139k (23.0%) to £744k, with an OPM increase to 4.5% (2020: 3.9%). OPM has started to recover from the recent decline.

CASH
Cash has decreased by £793k (59.7%) to £536k due to adverse movements in all working capital balances.

Inventories increased by £277k due to more clients, especially small clients who are supplied directly from inventory.

Receivables increased by £301k due to food retailers accounting for a larger share of revenue and having extended credit terms.

Payables reduced by £116k due to balances with previous supplier being settled.

The dividend paid of £1,200k was much larger than previous years (£500k) and cash would have increased had it not been paid.

CONCLUSIONS
Overall revenue increased impressively by £1,272kk (8.3%) to £16,653k which is a strong performance in a market which grew by 4.2%. Revenue from Vets increased moderately by £89k (2.3%) due to the recruitment of smaller independent practices. Pet stores revenue increased impressively by £297k (4.9%) due to an increase in online sales at PiP. Other revenue increased reasonably by £70k (2.9%) due to the acquisition of dog breeders and groomers. Revenue from food retailers increased impressively by £816k (27.6%) due to the addition of two new clients in July 2021.

COS increased by £932k (7.6%) due to an increase in all costs.

GP increased impressively by £340k (10.9%), with a slight GPM increase to 20.7% from 20.2%, despite a revenue shift towards food retailers who receive a higher discount.

Distribution costs increased by £207k (18.0%) due to a greater number of clients as this may require more deliveries.

Admin costs decreased slightly by £6k (0.4%) due to costs being well controlled.

OP has increased impressively by £139k (23.0%) to £744k, with an OPM increase to 4.5% (2020: 3.9%).

Cash has decreased by £793k (59.7%) to £536k due to adverse movements in all working capital balances.

RECOMMENDATIONS
Further analysis of each channel/profit analysis by channel.
Revenue/profit analysis by client.
Win more retail clients to increase scale.
Include food retailers in KPI measures.
Invest in new PPE.
Improve distribution route efficiency.
Obtain credit from new supplier.

APPENDIX 2: EasySave Proposal

		£k	£k	£k
	Option 1	**31.12.22**	**31.12.23**	**TOTAL**
	Revenue (W1)	1500	3300	4800
	Materials	-765	-1700	-2465
	Labour	-150	-365	-515
	Overheads	-300	-660	-960
	GP	285	575	860
	GPM	19.0%	17.4%	17.9%
7.50%	Dist	-112.5	-247.5	-360
	Admin			
	OP	172.5	327.5	500
	OPM	11.5%	9.9%	10.4%
	Revenue (W1)			
	Average RRP per kg	4.00	4.00	
50%	Discount	-2.00	-2.00	
	Price per kg	2.00	2.00	growth
	Tonnes sold	750	1650	120.0%
	Revenue	1500	3300	
	Materials (W2)			
	Price per kg	1	1	
	Tonnes purchased	765	1700	
		765	1700	
	wastage	15	50	
	wastage %	2.0%	2.9%	
	2021 Revenue	16653		
	2022 addition	9.0%		
	2023 addition	19.8%		
	2021 GPM	20.7%		
	2021 OPM	4.5%		

	Option 2	31.12.22	31.12.23	TOTAL
	Revenue (W1)	700	1540	2240
	Materials	-255	-560	-815
	Labour	-100	-230	-330
	Overheads	-175	-385	-560
	GP	170	365	535
	GPM	24.3%	23.7%	23.9%
7.5%	Dist	-52.5	-115.5	-168
	Admin			
	OP	117.5	249.5	367
	OPM	16.8%	16.2%	16.4%
	Revenue (W1)			
	Average RRP per kg	4.00	4.00	
30%	Discount	-1.20	-1.20	
	Price per kg	2.80	2.80	growth
	Tonnes sold	250	550	120.0%
	Revenue	700	1540	
	Materials (W2)			
	Price per kg	1	1	
	Tonnes purchased	255	560	
		255	560	
	wastage	5	10	
	wastage %	2.0%	1.8%	
	2021 Revenue	16653		
	2022 addition	4.2%		
	2023 addition	9.2%		
	2021 GPM	20.7%		
	2021 OPM	4.5%		

	Year 1 (9m)	Year 2	growth
Taylors	867	2952	**240.5%**
12m	**1,156**		
New clients (3m)	360		
12m	1440		
per client	**720**		

FINANCIAL EVALUATION OF EASYSAVE PROPOSAL

CONTEXT

As a result of COVID-19 and the economic impact, it is likely that consumers will increase spending at budget supermarkets so this could increase potential sales via EasySave.

DGS previously identified the opportunity to win more food retailer clients to escape the price pressures in the vets and pet stores channels and this proposal will help fulfil that strategy.

DGS acquired two new food retailers in 2021 as well as growing revenue to Taylors. This was the fastest growing channel so this proposal enables DGS to expand even further.

DGS is selective about which retailers it works with so its differentiation position is enhanced. EasySave is a budget retailer so is not a suitable match for the DGS brand.

RESULTS AND FINANCIAL ANALYSIS

Under option 1, operating profit will be £172.5k in 2022 (OPM: 11.5%), £327.5k in 2023 (OPM: 9.9%), giving a total of £500k. OPM in both years will be higher than the current OPM of 4.5%.

Revenue will be £1,500k in 2022 and £3,300k in 2023. This will add 9% and 19.8% to existing revenue.

Under option 2, operating profit will be £117.5k in 2022 (OPM: 16.8%), £249.5k in 2023 (OPM: 16.2%), giving a total of £367k. OPM in both years will be higher than the current OPM of 4.5%.

Revenue will be £700k in 2022 and £1,540k in 2023. This will add 4.2% and 9.2% to existing revenue.

Option 1 has higher revenue and profit in absolute terms. However, because of the larger discount (50% v 30%), OPM is lower for option 1 compared with option 2.

EasySave is growing so revenue and profits will likely increase beyond the forecast period. There could also be economies of scale on costs if future volumes increase.

As sales will be made on credit, additional funding may be required as the current cash balance (£536k) is lower than the costs to produce and distribute.

Payment terms are more favourable for option 1 but because of the larger volumes involves, the working capital investment will be larger.

The 50% discount is more favourable than that given to Taylors (40%) so appears excessive.

ASSUMPTIONS

The calculation is based on various assumptions and the results will change if the assumptions change.

Sales volumes could be lower because they are based on estimates by EasySave who may be biased to make the proposal appear more attractive. Also, DGS products will be competing with cheaper brands which will make DGS products less attractive to EasySave's budget conscious shoppers.

Average sales price could be lower because EasySave customers are budget customers who focus on price not quality.

Revenue appears optimistic compared with revenue generated from Taylors in the first year (9m: £867k) given that Taylors (250 large stores and 650 smaller stores) is much larger than EasySave.

Materials price could be lower because it should be possible to negotiate bulk discounts with suppliers.

Wastage is likely to be higher because it appears very low compared with 2021 levels (8.8%). The assumptions seem to suggest that wastage will be lower than the 5% exceptional level.

Labour costs will be higher if overtime and temporary staff are needed as was the case in 2021. Also, there are likely to be wage increases. However, labour costs could be lower if production planned properly because labour costs can usually be controlled even when there is a volume increase.

Production overheads could be higher if the supply results in more production runs.

Distribution costs are likely to be higher because they were 8.1% in 2021. Also, distribution costs will be higher under option 1 because deliveries will be more frequent.

There are likely be some additional admin costs involved.

STORAGE FACILITY

Current storage is limited and DGS will need space to hold more inventories as the business expands.

Having an additional 40% will enable DGS to purchase larger quantities of raw materials and benefit from economies of scale.

The new facility appears to be in a suitable location.

The facility can be funded from additional cash reserves but cash could be required for working capital so it may be better to arrange long-term financing for the facility.

Additional storage equipment and staff will be required which will increase the cost.

CONCLUSIONS

Under option 1, operating profit will be £172.5k in 2022 (OPM: 11.5%), £327.5k in 2023 (OPM: 9.9%), giving a total of £500k. Under option 2, operating profit will be £117.5k in 2022 (OPM: 16.8%), £249.5k in 2023 (OPM: 16.2%), giving a total of £367k.

Sales volumes could be lower because they are based on estimates by EasySave who may be bias to make the proposal appear more attractive. Also, DGS products will be competing with cheaper brands which will make DGS products less attractive to EasySave's budget conscious shoppers.

Wastage is likely to be higher because it appears very low compared with 2021 levels (8.8%). The assumptions seem to suggest that wastage will be lower than the 5% exceptional level.

Current storage is limited and DGS will need space to hold more inventories as the business expands.

DGS should not proceed with the EasySave proposal because selling via EasySave is not consistent with the differentiation strategy pursued by DGS.

RECOMMENDATIONS

Find other upmarket retail clients.
Ensure EasySave has signed an NDA re discounts.
Further research on storage facility costs.

Discuss funding with bank.
Due diligence on EasySave.

APPENDIX 3: Contamination Incident

	£k
Client refunds (W1)	-750
Distribution	-120
Inventory write off	-250
Storage and destruction	-50
PR consultancy	-80
Legal	-50
Total cost	**-1300**
Client refunds (W1)	
Average value	3.75
Average volume	5
	18.75
No of clients	40
	750

EVALUATION OF CONTAMINATION INCIDENT

CONTEXT

COVID-19 has resulted in more online activity so any adverse news about DGS is likely to spread fast.

Ade John previously raised concerns about contaminated products, control failures and stressed staff. This incident appears to show these concerns were valid.

Products have been contaminated previously with Salmonella but the affected products were identified before the goods were dispatched. However, the same controls did not identify the current incident.

FINANCIAL IMPACT

The incident will result in additional costs of £1,300k.

OP for 2021 was only £744k so the incident is likely to result in DGS making a loss in the year ended 30 September 2022.

DGS does not have sufficient cash (£536k) to cover the costs and refunds so additional funding may be needed.

There will also be a decline in revenue from existing clients when they become aware of the incident. This will reduce profit/increase the loss further.

There are likely to be fines as dog food is heavily regulated.

The calculation is based on various assumptions and the results will change if the assumptions change. For example, legal costs could be much higher and fines have not been included.

STRATEGIC AND OPERATIONAL IMPACT

DGS is likely to lose clients when they become aware of the incident, particularly Taylors who has stopped purchasing from another supplier due to a similar issue.

The loss of Taylors will add to the financial impact and could cause DGS to go out of business as they account for a substantial portion of revenue (20.5%).

Current and potential pet owning customers will become aware of the incident when the recall notification is made. This will damage the DGS brand and deter customers from purchasing DGS products as 23% have stated that they would not purchase from the brand again.

Healthiness of dog food is a key purchasing factor so reports of E. coli will deter many customers.

However, the PR agency may be able to mitigate some of the damage.

If DGS can demonstrate that they were not responsible then it could help reduce damage to the brand and loss of custom.

Late orders from clients appears to have been a contributing factor. This was previously identified by Ade John so this incident could increase conflict between the sales team and production team.

It appears current controls are not operating so will need to be improved.

The use of temporary staff and overtime appears to have been a contributing factor as staff did not follow control procedures. This could have resulted in other incidents and changes are needed to labour management.

If DGS suffers a lot of bad publicity then staff may become demotivated working for DGS.

Competitors such a PAW may dispute the health claims made by DGS products following the incident, this will add further damage to the DGS brand.

A significant amount of management time will be taken up via the crisis team which will distract from other business areas.

ETHICS

The supervisor has been off work with stress and Ade John previously reported staff stress as an issue. DGS has a responsibility for the mental health of its workforce and should not place staff under excessive pressure.

Butterfly have suggested that DGS should not contact clients yet. The contaminated products pose a health threat so any delay could result in harm to pets.

Butterfly have suggested that DGS should see if they can blame a supplier for the issue. Even if a supplier is partly at fault, DGS still has responsibility for the product.

Butterfly have advised that that DGS should not publish a notification of its website. This could cause some pet owners to use the product which could harm pets and damage the DGS brand further.

Recommendations

Discuss issues with staff and find resolution.
DGS should not delay contacting clients if pets at risk.
Investigate to see if a supplier was responsible.
Post notification on website.

CONCLUSIONS

The incident will result in additional costs of £1,300k.

OP for 2021 was only £744k so the incident is likely to result in DGS making a loss in the year ended 30 September 2022.

DGS is likely to lose clients when they become aware of the incident, particularly Taylors who has stopped purchasing from another supplier due to a similar issue.

The use of temporary staff and overtime appears to have been a contributing factor as staff did not follow control procedures. This could have resulted in other incidents and changes are needed to labour management.

The supervisor has been off work with stress and Ade John previously reported staff stress as an issue. DGS has a responsibility for the mental health of its workforce and should not place staff under excessive pressure.

DGS should continue with the action plan proposed by the crisis team and prioritise pet safety.

RECOMMENDATIONS

Investigation into cause of contamination.

Offer compensation for affected pet owners.
Implement stricter control procedures.
Arrange finance for recall costs.
Communicate issue with clients.
Set timetable for activities.

ADVANCED LEVEL CASE STUDY EXAMINATION
NOVEMBER 2021
(4 HOURS)

ICAEW PARTNER IN LEARNING

ACA MASTERS

Case Study: Mock Exam 3

Guidance:

To obtain maximum benefit, this mock exam should be sat under full exam conditions using the Case Study CBE software which is available from the ICAEW website. You should use the exam technique taught during the 'How to Ace the ACA Case Study' class.

Once you have completed the exam, you should use the marking grids provided to calculate whether you have scored enough passing grades for each section.

In order to improve your grade, you should carefully analyse how the report has been structured and written in the prize-winner model answer.

EXHIBIT 18

EMAIL

From: Val Williams
To: Jace Moon
Subject: Draft management accounts and business developments
Date: 3 November 2021

We have just received the latest draft management accounts from DGS. We need to review these, and we also need to address two business issues facing DGS. I am attaching the following:

- Draft management accounts for the year ended 30 September 2021 **(Exhibit 19)**
- Additional information relating to the management accounts **(Exhibit 20)**
- An email from Preet Sharma to me about Nu-Dog-Fit **(Exhibit 21)**
- An email from Ade John to me about a new product recovery system **(Exhibit 22a)**, together with media coverage **(Exhibit 22b)**

Please draft for my review a report addressed to the DGS board. The report should comprise the following.

1. A review of DGS's draft management accounts for the year ended 30 September 2021 in comparison with the year ended 30 September 2020.

Your review should be based on the management accounts as set out in **Exhibit 19**. It should cover revenue, for each channel and in total; gross profit; and operating profit. In your review you should refer to the additional information provided in **Exhibit 20**. You should also respond to the request for advice on the product recall issue (**Exhibit 20**).

2. An evaluation as to whether DGS should continue with the production of Nu-Dog-Fit **(Exhibit 21)**.

Using the information in **Exhibit 21,** you should assess the ROI based on the first two years' trading and evaluate the second year's trading results. You should also calculate the expected revenue and gross profit for the three years starting 1 October 2021. You should assess the adequacy of the assumptions and estimates. You should recommend, with reasons, how DGS should proceed.

3. An evaluation of the proposal to invest in a product recovery system **(Exhibit 22a)**.

You should identify, with relevant calculations, the financial, operational, and strategic issues that DGS should consider when deciding whether to proceed with the investment in a product recovery system. You should incorporate any ethical and business trust aspects, including those arising from **Exhibit 22b.**

EXHIBIT 19

DGS: Draft management accounts for the year ended 30 September 2021

Statement of profit and loss for the year ended 30 September 2021

	£000
Revenue (Note 1)	15,684
Cost of sales (Note 2)	(13,209)
Gross profit	**2,475**
Distribution costs	(1,175)
Administrative expenses	(1,366)
Operating loss	**(66)**
Net finance expense	(105)
Loss before taxation	(171)
Income tax	34
Loss for the year	**(137)**

Statement of financial position as at 30 September 2021

	£000
Non-current assets	
Property, plant and equipment (PPE) (Note 3)	2,265
	2,265
Current assets	
Inventories (Note 4)	1,745
Trade and other receivables (Note 5)	2,034
Cash and cash equivalents	642
Taxation	34
	4,455
TOTAL ASSETS	**6,720**
Equity	
Ordinary shares	5
Retained earnings	3,625
	3,630
Non-current liabilities	
5% bank loan (Note 6)	2,100
Current liabilities	
Trade and other payables (Note 7)	990
	3,090
TOTAL EQUITY AND LIABILITIES	**6,720**

Statement of cash flows for year ended 30 September 2021

	£000
Cash flows from operating activities	
Loss before taxation	(171)
Adjustments for:	
Depreciation	371
Loss on disposal of PPE	18
Finance expense	105
	323
Change in inventories	(122)
Change in trade and other receivables	(121)
Change in trade and other payables	97
	177
Income tax paid	(95)
Net cash generated from operating activities	**82**
Investing activities	
Acquisition of PPE	(206)
Proceeds from disposal of PPE	42
Net cash generated from investing activities	**(164)**
Financing activities	
Interest paid	(105)
Dividends paid	(500)
Cash flows used financing activities	**(605)**
Net change in cash and cash equivalents	(687)
Cash and cash equivalents at start of period	1,329
Cash and cash equivalents at end of period	**642**

Notes to the management accounts

Note 1: Revenue by channel

	£000
Veterinary practices	3,331
Specialist pet stores	5,686
Other	1,804
Taylors	4,863
	15,684

Note 2: Cost of sales by category

	£000
Materials	6,762
Production labour	1,809
Production overheads	4,638
	13,209

Note 3: PPE

	£000
Cost	
1 October 2020	5,788
Additions	206
Disposals	(152)
30 September 2021	5,842
Depreciation	
1 October 2020	3,298
Charge for year	371
On disposals	(92)
30 September 2021	3,577
Carrying amount	
30 September 2021	**2,265**

Note 4: Inventories

	£000
Packaging and consumables	373
Raw materials	770
Finished goods	602
	1,745

Inventories are carried at the lower of cost and net realisable value.

Note 5: Trade and other receivables

	£000
Trade receivables	1,802
Other receivables and prepayments	232
	2,034

Note 6: 5% bank loan

The loan is secured on land included in PPE. The interest on the loan is at a fixed rate of 5% and payable annually in arrears. The loan is repayable in 2030 and carries an early redemption penalty.

Note 7: Trade and other payables

	£000
Trade payables	602
Other payables	388
	990

EXHIBIT 20

Note from Preet Sharma, 18 October 2021: Additional information relating to the draft management accounts for the year ended 30 September 2021

The following issues are reflected in the management accounts.

- Average revenue per client was as follows:

Channels	**Number of clients**
Veterinary practices	438
Specialist pet stores	118
Other	104
Total	**660**
Average revenue per client (£000)	16.40

- On 15 March 2021, Pets Alliance Wholesalers (PAW) used social media to dispute the health benefits of several DGS products. Some of the posts attracted a lot of attention and were shared widely among pet owners. Whilst the claims in the posts were unfounded, our attempts to counter them had little effect due to our limited online reach. On 1 April 2021, The Veterinary Support Trust (VST) informed us that they would no longer stock DGS products from 1 June 2021.

- On 1 November 2020, Taylors announced an expansion of its online shopping and home delivery service by making more products available for home delivery and acquiring more delivery vehicles. In its financial year ended 30 June 2021, Taylors reported record growth in its online division.

- On 1 January 2021, Pets in Paradise (PiP) significantly expanded the number of brands available online. This expansion has resulted in PiP stocking products produced by most of DGS's rivals. Many of these rival products make similar health claims to DGS products.

- Due to the sales and business development team operating under stricter parameters, the average discounts by channel were the same as the year ended 30 September 2020.

- Three new products were launched in August and September 2021.

- Delays and disruptions to supplies have continued to build throughout the year. Whilst we have been able to obtain the ingredients necessary to continue with production, the cost of materials has begun to increase significantly.

- There have also been shortages in the supply of staff since January 2021. This has resulted in salaries increasing by 4% and staff having to work overtime.

- The materials wastage KPI was 9.7%.

Product recall

On 22 August 2021, one of our specialist pet store clients, Happy Pups, informed us that several pet owners had returned one of our dry food products because the expiry date had passed.

Happy Pups provided photographic evidence showing that all the returned items displayed an expiry date of 31 December 2019 on the packaging. Our records show that 100 2.5kg packs were delivered to Happy Pups on 16 May 2021 at a price of £7 per pack.

On further investigation, we identified that the food was produced on 10 April 2021 so it appears as though an error has been made when the food was packaged.

Happy Pups will notify customers advising them to check expiry dates on DGS products and ask that expired products are returned. We have agreed to refund the delivery made to Happy Pups on 16 May 2021 and collect the affected goods from Happy Pups so that they can be securely discarded.

Please advise the DGS board on (a) the action it should take to deal with this situation and (b) what adjustments, if any, it should make to the draft management accounts.

EXHIBIT 21

EMAIL

From: Preet Sharma
To: Val Williams
Subject: Nu-Dog-Fit
Date: 12 October 2021

Nu-Dog-Fit has just completed its second year of trading. Whilst the results achieved in terms of volume were below predictions, the product remained very popular with young, health-conscious pet owners. We now need to decide whether to continue producing and selling Nu-Dog-Fit.

The results for Nu-Dog-Fit for the year ended 30 September 2021 are set out below.

Volume: tonnes	112
	£000
Revenue	459
Materials	(241)
Labour	(46)
Production	(110)
Cost of goods sold	397
Gross profit	**62**
Gross profit %	13.5%

Notes

- In April 2021, we launched two new variants of Nu-Dog-Fit. Both were vegetable only variants and were well received by pet owners.

- In June 2021, one of the UK's largest pet food manufacturers launched a rival product. The product was heavily advertised by the manufacturer and several large retailers, including Taylors which is where most of our Nu-Dog-Fit sales are made. Advertising campaigns emphasised the health benefits, particularly heart health, and claimed that the product was the most scientifically advanced dog food product on the market. The rival product was launched with an RRP of £5 at and has remained at that level since.

- Between 1 October 2020 and 31 May 2021, 92 tonnes of Nu-Dog-Fit were sold.

- Between 1 June 2021 and 31 July 2021, 6 tonnes of Nu-Dog-Fit were sold.

- Between 1 August and 30 September 2021, 14 tonnes of Nu-Dog-Fit were sold.

- As a result of sales volumes being lower than expected, we are currently holding inventories in relation to Nu-Dog-Fit. These include both raw materials and finished goods.

Assumptions for the three years starting 1 October 2021

7. Sales volume in the year ended 30 September 2022 will be 175 tonnes. This will increase by 12% in the year to 30 September 2023 and by a further 5% in the year ended 30 September 2024.

8. RRP was reduced to £5.00 from 1 October 2021 and will stay at that level for the duration of the product's life.

9. The average discount in the year ended 30 September 2022 will be 20%. Following the introduction of Direct-to-Customer (DTC) sales via the DGS website, the average discount will reduce to 10% in the year ended 30 September 2023 and will remain at that level.

10. Materials costs:
    year ended 30 September 2022: £2.00 per kg
    year ended 30 September 2023: £1.90 per kg
    year ended 30 September 2024: £1.80 per kg

11. Labour costs:
    year ended 30 September 2022: £70,000
    year ended 30 September 2023: £76,000
    year ended 30 September 2024: £76,000

12. There will be no change in production costs.

13. Following positive feedback from focus groups, a dry food version of Nu-Dog-Fit will be launched on 1 October 2022. Due to uncertainties regarding likely sales volumes, the impact of the dry food version has not been included in the above assumptions.

Research provided by sales and business development team

Revenue generated from three recent products which continued after the first two years of trading was as follows.

	Year 3 **£000**	**Year 4** **£000**	**Year 5** **£000**
Product A	63	72	28
Product B	201	98	38
Product C	126	75	109

EXHIBIT 22a

EMAIL

From: Ade John
To: Val Williams
Subject: Product recovery system
Date: 1 November 2021

Following Preet Sharma's request for all directors to identify potential cost savings in their respective areas, we contacted Product Recovery & Cleaning Limited (PRC) about implementing a product recovery system.

A product recovery system is required because the amount of wastage is increasing and it represents a significant financial cost to DGS. Also, the number of labour hours spent flushing out and decontaminating the plant between production runs has increased as we have started to produce a greater number of products and more variants.

The product recovery system will flush out the remaining product after each production run and will clean the plant ready for the next production run. This will reduce wastage and save valuable product. Furthermore, it will reduce the amount of labour hours spent flushing out and decontaminating the plant between batches.

DGS has not worked with PRC previously, but PRC has worked with several of DGS's competitors. PRC have advised that all DGS's competitors are using product recovery systems and that DGS is at a major disadvantage by not having one.

PRC have also advised that due to the age, condition, and technical capability of DGS's current equipment, new equipment should be purchased as this will enable DGS to benefit from the latest technological advancements in product recovery and cleaning. Whilst it is possible to fit the product recovery system to existing equipment, the product recovery and cleaning processes will be considerably less effective. The new equipment and product recovery system are expected to last around 10 years.

Based on internal records and discussions with PRC, the following estimates have been made.

Year ended 30 September 2021:	
Average amount of product used per day	17.9 tonnes
Average amount of product lost per day	1.7 tonnes
Average cost of product	£1.50 per kg
New system:	
Amount of product to be recovered per day	1 tonne
Annual labour cost saving	£10,000
Annual production cost saving	£30,000
Cost of new equipment	£680,000
Cost of new product recovery system	£120,000
Number of days plant operational per year	250

Other areas of potential saving

1. **Packaging**

Currently, products are sold in packages which are considerably larger than they need to be. I have been told that this is a sales tactic to make the product look bigger than it really is and is a method employed by most pet food manufacturers. If we could reduce the packaging down to what it needs to be then considerable savings could be made.

2. **Production scheduling**

If we had reliable production forecasts then we could make substantial labour and production overhead savings. However, orders from clients, particularly large clients, have become increasingly erratic. The biggest problem is Taylors. It appears Charlie Bailey has no control over when they make orders. On several occasions I have explained that late orders cause a significant increase in costs but he seems unable to manage the client in such a way as to give us some sort of predictability.

EXHIBIT 22b

RECENT MEDIA COVERAGE

Contaminated PAWs (Pets Weekly, October 2021)

Pets Alliance Wholesalers (PAW), the popular pet food manufacturer, has recalled one of its dog food products due to concerns over Salmonella. Pet owners are being asked to return any affected items to the place of purchase for a full refund.

The cause of the contamination is not yet clear. However, according to a former employee, as the PAW business has grown, investment in equipment, cleaning processes and quality assurance has not kept pace and this has resulted in numerous incidents of cross-contamination.

John Steptoe, CEO of PAW, stated: "We are recalling these products as a precautionary measure. It is highly unlikely that your pet is at risk, but we just want to be on the safe side".

If your pet has become ill after consuming a PAW product, you are advised to consult a vet and seek legal advice.

Online forum (October 2021)

'Just came back from the supermarket with a 6kg bag of DGS dog food. The product only fills about 40% of the bag, what is the other 60% for? I have no idea why they use so much excess packaging. None of it is recyclable which means it just causes unnecessary waste. Surely companies should do their bit by either cutting down on packaging or using recyclable materials.'

Reviews for sale (Business Insider, June 2021)

As more people shop online, positive reviews are increasingly important for businesses who want to stand out from their competitors. This has led to some unscrupulous businesses paying fake customers to leave reviews.

Following recent investigations, it now appears that this deceitful practice has started to spread to business-to-business sales. An undercover reporter found that Product Recovery & Cleaning Limited (PRC), a company specialising in the cleaning of manufacturing equipment, was prepared to pay businesses to recommend their service to other businesses in exchange for a fee, even though the referring business had never used their services!

Mock Exam 3 Mark Scheme

OVERALL ASSESSMENT CRITERIA	EXECUTIVE SUMMARY
	R1 - Review of financial performance
• Appropriate layout: headings AND paragraphs/sentences • Appropriate disclaimer AND report from firm • Suitable language: formal AND tactful AND ethical • Reasonable spelling and grammar	• Total revenue: qualitative comment **with fig** • Channel revenue: qualitative comment **with fig** • GP/GP%/OP/OP%: qualitative comment **with fig** • Product recall issue: impact on accounts **with fig**
NA ID IC SC CC	**NA ID IC SC CC**
	• Revenue: client losses AND av. revenue decline / revenue decline without Taylors again • OP/OP%: loss unsustainable • Contest PAW claims/legal action / resolve production issues urgently • Appropriate summary of report section
NA ID IC SC CC	**NA ID IC SC CC**

R2 - Evaluation of Nu-Dog-Fit	R3 - Evaluation of product recovery system
• Gives ROI with fig • Concludes on 2021 trading results • Expected revenue/profit • Evaluates/questions assumptions	• Calculates financial impact with fig • Concludes on main operational issue • Concludes on main strategic issue • Will help restore profit
NA ID IC SC CC	**NA ID IC SC CC**
• Concludes on way forward • Continuation will help restore profitability • More research / negotiate with clients • Appropriate summary of report section	• Proceed with new product recovery system • Concludes/recommends on ethical/business trust issues • Find alternative suppliers / obtain more quotes • Appropriate summary of report section
NA ID IC SC CC	**NA ID IC SC CC**

REQUIREMENT 1 – Review of financial performance

ASSIMILATING & USING INFORMATION	STRUCTURING PROBLEMS & SOLUTIONS
Appendix 1 • Presents 2021 figures • Presents 2020 figures • Analysis of revenue by channel • Analysis of COS AND distribution/admin	**Financial analysis: revenue (report)** • Vets: loss of VST due to PAW actions • Pet stores: PiP increased brands available • Other: customers purchasing online not in person • Taylors: expanded online operations / strong growth continues • Clients: down 21/3.1% OR Av. revenue: down £1.86k/10.2% • Mix: Vets (21.2% v 25.4%) / Pet (36.3% v 39.7%) / Other (11.5% v 15.7%) / Taylors (31.0% v 19.2%)
NA ID IC SC CC	**NA ID IC SC CC**
AI/CS Exam info (report/appendix) • Overall revenue: up £303k / 2.0% • Vets: down £582k / 14.9% • Pet stores: down £419k / 6.9% • Other: down £607k / 25.2% • Taylors: up £1,911k / 64.7%	**Financial analysis: GP/OP (report)** • Overall COS: up £934k / 7.6% • Materials: up £569k / 9.2% OR Labour: up £172k / 10.5% OR Production: £193k / 4.3% • GP: down £631k / 20.3% OR GP% down 15.8% v 20.2% • Distribution: up £28k / 2.4% OR Admin: up £12k / 0.9% • Overall OP: down (£66k) / 110.9% OR Overall OP%: down (0.4%) v 3.9%
NA ID IC SC CC	**NA ID IC SC CC**
Business issues / wider context • Impact of COVID-19 on business / economic downturn • Ind trends: increase in pet ownership / health focus • Ind: UK dog food market approx. £1.5m / DGS has small share of market • Online sales via supermarkets and pet stores increasing • Price-based competition due to concentration • DGS shift towards mainstream retailers	**Identification of product recall issues** • Causes: staff shortages / new products / late orders / staff stressed / overtime / new clients • First time DGS has had a product recall • Provision: £0.7k • Provision to include other costs e.g. collection • Provision will impact profit **with fig** • Dog food heavily regulated so could be fines
NA ID IC SC CC	**NA ID IC SC CC**

REQUIREMENT 1 – Review of financial performance

APPLYING JUDGEMENT	CONCLUSIONS AND RECOMMENDATIONS
Evaluation of revenue analysis • Total revenue: 2.0% v growth last year (2.6%) • Weighted average discount 32.8% v 2020 (31.2%) • Revenue decline without Taylors **again** • VST/PiP complaints to Hugh Logan about service • Client losses (£383k) AND av. revenue decline (£1,225k) / change in number of clients/av. revenue by channel • New product launches: little impact / will have impact next year	**Draws conclusions (under a heading)** • Total revenue: qualitative comment **with fig** • Channel revenue: qualitative comment **with fig** • GP/GP%/OP/OP%: qualitative comment **with fig** • Concludes on product recall issue
NA ID IC SC CC	**NA ID IC SC CC**
Evaluation of GP/OP • Compares COS/fall in GP to revenue • Materials: supply problems / Labour: labour shortages / Production: large client orders • GP/GP%: increased discounts/revenue shift towards Taylors/ all COS lines increasing as % of revenue • Distribution/Admin: well controlled / % of rev • OP/OP%: loss unsustainable/concerning	**Makes recommendations** • Further analysis by channel / further cost analysis • Contest PAW claims / consider legal action • Introduce DTC sales via website / increase SM activity • Win more retail clients to increase scale • Invest in pigging to reduce wastage • Other commercial recommendations
NA ID IC SC CC	**NA ID IC SC CC**
Evaluation/Recommendations: product recall • Previous control failure / concerns raised by Ade John • Issue may impact DGS brand / reputation for quality • Compensate client / consider if other products affected • Financial impact small / recall could have future implications • Prioritise staffing issue / procedure improvement • Fortunate that issue appears isolated / must address causes	
NA ID IC SC CC	**NA ID IC SC CC**

REQUIREMENT 2 – Evaluation of Nu-Dog-Fit

ASSIMILATING & USING INFORMATION	STRUCTURING PROBLEMS & SOLUTIONS
Appendix 2 • Numbers labelled AND clearly derived • Calculation of ROI • Flexes predicted numbers for actual volumes • Calculation of expected GP	**Calculation of 2021 (appx or report)** • ROI: 25.2% • Revenue variance: (1.5%) • Materials variance: (11.2%) • Labour variance: (17.2%) • Production variance: (2.7%)
NA ID IC SC CC	NA ID IC SC CC
AI/CSE information (report/appendix) • 2021 Volume: 112 tonnes • 2021 Revenue: £459k • 2021 Materials: £241k • 2021 Labour: £46k • 2021 Overheads: £110k	**Calculation of prediction (appx or report)** • Volume: 175 + 196 + 206 tonnes / 577 tonnes • Revenue: £700k + £882k + £926k / £2,508k • Materials: £350k + £372k + £370k / £1,093k • Labour: £70k + £76k + £76k / £222k • Overheads: £110k + £110k + £110k / £330k • GP: £170k + £324k + £370k / £863k
NA ID IC SC CC	NA ID IC SC CC
Business issues / wider context • Impact of COVID-19 on the business • Young pet owners focussed on health / young more likely to shop online / scientific advances in pet nutrition • Taylors: provided access to younger customer / 2021 revenue increase / online / 40% discount • Year 1: ahead of predictions • 2021: operating loss / negative OPM / materials price increase / labour shortage • DTC sales will be at higher margin / lower discount	**Assumptions** • Volume: compares with previous increases / 2021 changes (8m/2m/2m) • Revenue: RRP in line with rival product / £4.00/£4.50 per kg • Materials: decrease unrealistic / prices increasing • Labour: could be higher e.g. wage increases • Overheads: could be higher e.g. more variants/issues • Changes in assumptions will impact calculations
NA ID IC SC CC	NA ID IC SC CC

REQUIREMENT 2 – Evaluation of Nu-Dog-Fit

APPLYING JUDGEMENT	CONCLUSIONS AND RECOMMENDATIONS
Evaluation of 2021 results • Passes Gateway 4 / compares to 25% target • Revenue: rival products launched / volume close to prediction in 8m to May • Materials: higher cost / wastage / inventories • Labour and production: pay rises / volume change / two new variants • Compares GP% with predicted GP% OR 2021 DGS GP% / all variances negative/unfavourable	**Draws conclusions (under a heading)** • Gives ROI with fig • Concludes on 2021 trading results • Expected revenue/profit • Evaluates/questions assumptions • Concludes on way forward
NA ID IC SC CC	**NA ID IC SC CC**
Evaluation of continuation • Revenue: access to growth market / new customer type • Calculates relative size / compares GP% to 2021 DGS GP% • Volumes declined initially before recovering • Dry food will increase revenue/profits • Enhances DGS brand / reputation for pet health • Ability to launch new products/variants in future / continuing will use inventories	**Makes recommendations** • Research e.g. impact of kibble range • Forecast sales mix between clients and DTC • Negotiate with clients • Sensitivity analysis / forecast impact on OP • Increase marketing / competitor analysis • Other commercial recommendations
NA ID IC SC CC	**NA ID IC SC CC**
Evaluation of assumptions • Volume: impact of rival products / compares to previous product launches • Revenue: DTC impact / impact will be gradual / smaller client discount may not be acceptable • Materials: economies of scale / inventory / storage limited • Labour: compares to 2021 increase / can increase volume without costs if efficient • Overheads: higher volumes will cause increase / clients making late changes • Benefit beyond 3 years / rival products already created	
NA ID IC SC CC	**NA ID IC SC CC**

REQUIREMENT 3 – Evaluation of new product recovery system

ASSIMILATING & USING INFORMATION	STRUCTURING PROBLEMS & SOLUTIONS
Workings / report • Numbers labelled AND clearly derived • Calculation of wastage saved • Calculation of other savings • Considers other savings e.g. utilities, chemicals	**Financial calculations (appx or report)** • Materials saved: £375k • Labour and production saved: £10k + £30k / £40k • Depreciation: £80k • Total savings: £415k / £335k • Impact on GP/GPM/OP/OPM with fig
NA ID IC SC CC	NA ID IC SC CC
AI/CSE information (report/appendix) • Recovered per day: 1 tonne / 1,000kg • Value: £1.50 per kg • Workings days: 250 • Equipment and system: £680k + £120k / £800k • All costs of sales lines increasing • DGS equipment lack modern technology / second-hand	**Operational and strategic impact** • Lower risk of contamination incident > • Less pressure on staff / labour hours used elsewhere > • Increased capacity / reduced downtime • Equipment: less maintenance / fewer breakdowns / competitors using product recovery systems • Wastage improvement significant / compares to 7%/5% > • Additional costs e.g. management time, repairs
NA ID IC SC CC	NA ID IC SC CC
Wider context • Impact of COVID-19 on the business • Wastage: 2021 9.7% / £656k • Previous contamination incident / first product recall in 2021 • Ade John concerns / pressures on production teams / temporary staff/overtime / equipment failures • PRC: highly recommended / market leading CIP enhancement • Bank balance £642k at year end	**Comments on ethical/bus trust issues** • Less production waste has environmental benefit > • PRC worked with rivals / rivals have advantage / pressure on DGS to implement > • Older equipment not as effective at reducing contamination risk > • Packaging has adverse environmental impact > • Concerns over Charlie Bailey managing Taylors > • PRC paying for recommendations/referrals >
NA ID IC SC CC	NA ID IC SC CC

REQUIREMENT 3 – Evaluation of new product recovery system

APPLYING JUDGEMENT	CONCLUSIONS AND RECOMMENDATIONS
Evaluation of financial impact • Any changes in assumptions will impact calculations • Compares with Company M results • Savings outweigh cost within two years • Will turn operating loss to profit • Cash balance insufficient for investment • Benefit will increase as products/variants/volume increase	**Draws conclusions (under a heading)** • Calculates financial impact with fig • Concludes on main operational/strategic issue • Concludes on ethics/business trust issues • Proceed with new product recovery system
NA ID IC SC CC	**NA ID IC SC CC**
Evaluation of operational/strategic impact • Reduces risk of DGS brand damage / PAW incident • Saving from less overtime / temporary staff • Does not resolve underlying issues e.g. late orders / sales team management of clients • Dog food is heavily regulated / compliance • Wastage still arises from poor scheduling / inventory control / spoilage • Improved batch control and product traceability	**Makes recommendations** • Obtain other quotes for comparison • DD on PRC • Negotiate with PRC • Contact bank re funding • Set timetable for activities / instal during downtime • Other commercial recommendations
NA ID IC SC CC	**NA ID IC SC CC**
Evaluation/recs: ethical/business trust • Recent SM/web posts critical of pet food manufacturers • Ensure confidentiality / non-disclosure agreement / PRC claims may be a sales tactic • DGS has responsibility for pet safety / benefits of new equipment outweigh costs • Impact on DGS brand / address packaging concerns / advertise as eco-friendly packaging • Hugh Logan also raised concerns / discuss with Louis Bailey/board / training • Visit previous clients to verify / Inspect systems	
NA ID IC SC CC	**NA ID IC SC CC**

Mock Exam 3 Model Answer

A report on Dog Gourmet Supplies (DGS) Limited

TO: Directors of DGS Limited

FROM: Oakley Dunstable

DATE: 3 November 2021

This report is for the Board of DGS Limited only and should not be distributed to third parties.

No liability can be accepted in this event.

Executive Summary

REVIEW OF FINANCIAL PERFORMANCE FOR YEAR ENDED 30 SEPTEMBER 2021

Overall revenue increased modestly by £303k (2.0%) to £15,684k which is a poor performance in a market which grows globally at 5% per annum. Excluding Taylors, revenue has continued to decrease (£1,608k/12.9%). The number of clients has decreased by 21, causing a decrease in revenue of £383k. There has also been a decrease in the average revenue per client of £1.86k to £16.40k causing a decrease in revenue of £1,225k. Revenue from Vets decreased disappointingly by £582k (14.9%) due to the loss of VST following PAW's social media posts. Pet stores revenue surprisingly decreased by £419k (6.9%) due to PiP stocking competing brands who make similar health claims to DGS. Other revenue decreased dramatically by £607k (25.2%) as most sales are made in person and pet owners are increasingly purchasing online. Revenue from Taylors increased impressively by £1,911k (64.7%) due to Taylors expanding its online shopping facilities and recording record growth.

GP decreased disappointingly by £631k (20.3%), with a dramatic GPM decrease to 15.8% from 20.2%, due to increased discounts, Taylors accounting for a larger share of revenue and all costs increasing as a percentage of revenue.

OP has collapsed by £671k (110.9%) to an operating loss of £66k, with OPM turning negative at 0.4% (2020 OPM: 3.9%). Making a loss is unsustainable and alarming.

A provision of £700 should be made for the refund to be made to Happy Pups. Other costs such as collection of products should also be included. The impact is relatively small and will increase the operating loss to £66.7k. Ade John has previously raised concerns about how control weaknesses arising from staff shortages could result in an error.

RECOMMENDATIONS

Take legal action against PAW.
Introduce DTC sales via website to improve margins.
Ensure production staff are not overworked and have sufficient resource to operate effectively and safely.

**highlighted text demonstrates key points to bring to the attention of the directors. These were not included in the conclusions and were added to the Executive Summary.*

EVALUATION OF NU-DOG-FIT

Based on the first two years' trading, ROI is 25.2% which is slightly above the 25% target. 2021 performance was well below predictions and all amounts were adverse.

Revenue for the three years starting 1 October 2021 is expected to be £700k, £882k and £926k.

GP for the three years starting 1 October 2021 is expected to be £170k, £324k and £370k with a GPM of 24.3%, 36.7% and 39.9%. GPM for all years is higher than 2021 GPM of 15.8%. DGS made an operating loss in 2021 and continuing Nu-Dog-Fit will likely result in increased OP.

Volumes are unlikely to consistently increase because none of DGS's previous product launches saw consistent increases in volume from year 3 onwards. Also, the 2023 price per kg appears high because even though they will have less discount, it will take time for DTC sales to make a substantial portion of sales. Most sales will continue to be via Taylors which is at a 40% discount.

Materials are likely to be higher because prices increased in 2021 and have increased in all recent years. However, there could be economies of scale as volumes increase.

Nu-Dog-Fit has enabled DGS to reach a new, growing customer base. By continuing with Nu-Dog-Fit, DGS can build its reputation with this customer base and launch new products in the future.

Once the assumptions for the prediction have been verified, DGS should proceed with Nu-Dog-Fit because it passes the Gateway 4 test of ROI in excess of 25% and there is expected growth in revenue and profits.

RECOMMENDATIONS

Research expected impact of dry food range.
Negotiate discounts with clients to see if 20% possible.
Increase marketing activities.

EVALUATION OF PRODUCT RECOVERY SYSTEM

Financially, the new system will result in a cost saving of £335k per annum. This is a significant saving as it would turn the current operating loss of £66k to a profit of £269k. DGS does not have sufficient cash (£642k) for the acquisition of new equipment so finance may need to be arranged. This will result in an interest expense.

Operationally, labour time can be spent elsewhere which will increase productivity and capacity. Also, overtime and temporary staff can be reduced. The wastage KPI will reduce from 9.7% to around 4.2% which is below the 7% target and 5% which is considered exceptional.

Strategically, cleaning and decontamination will be more thorough which will reduce the risk of a product recall and subsequent damage to DGS brand, as has occurred at PAW. Also, by using the latest technology, DGS may have an advantage over competitors. At the very least, DGS will not fall behind competitors.

Ethically, the new system will result in less waste because copious amounts of water and chemicals are currently used. This will reduce the environmental impact of operations. Recent media articles and social media posts have been critical of pet food manufactures so this will help improve reputation of the industry and DGS. Also, there are media reports that PRC is paying companies for positive referrals so recommendations may not be authentic. Reports in the media may not be accurate so need to be verified.

DGS should proceed with the new product recovery system as it will save costs, increase capacity, reduce pressure on staff and reduce the risk of decontamination.

RECOMMENDATIONS

Obtain other quotes for comparison.
Contact bank regarding loan to purchase equipment.
Emphasise actions taken to reduce waste on DGS website.

APPENDIX 1: Analysis of Management Accounts 30 September 2021

		2021	2020	Change	%
		£k	£k	£k	
REVENUE					
	Vets	3331	3913	-582	-14.9%
	Pet stores	5686	6105	-419	-6.9%
	Other	1804	2411	-607	-25.2%
	Taylors	4863	2952	1911	64.7%
		15684	15381	303	2.0%
	Ex Taylors	10821	12429	-1608	-12.9%
Mix	Vets	21.2%	25.4%	-4.2%	
	Pet stores	36.3%	39.7%	-3.4%	
	Other	11.5%	15.7%	-4.2%	
	Taylors	31.0%	19.2%	11.8%	
		100.0%	100.0%	0	
Clients	Vets	438	448	-10	-2.2%
	Pet stores	118	125	-7	-5.6%
	Other	104	108	-4	-3.7%
	Total	660	681	-21	-3.1%
Average rev per client	Vets	7.61	8.73	-1.13	-12.9%
	Pet stores	48.19	48.84	-0.65	-1.3%
	Other	17.35	22.32	-4.98	-22.3%
	Total	16.40	18.25	-1.86	-10.2%
		Total			
Revenue bridge	New clients (net)	-21			
	Average rev per client - PY	18.25			
	Net client gains	**-383**			
	Average rev per client - CY	16.40			
	Average rev per client - PY	18.25			
		-1.86			
	Clients - CY	660			
	Change in average revenue	**-1225**			
	CHANGE IN REVENUE	**-1608**			

Average discount		Net	Discount	RRP*	
	Vets	3331	30.0%	4759	
	Pet stores	5686	30.0%	8123	
	Other	1804	23.0%	2343	
	Taylors	4863	40.0%	8105	
		15684	**32.8%**	**23329**	

*RRP can be calculated as Net/(1-Discount) e.g. Vets RRP = £3,331/(1-.30)

COS	Materials	6762	6193	569	9.2%
	Labour	1809	1637	172	10.5%
	Overheads	4638	4445	193	4.3%
		13209	12275	934	7.6%
	% of revenue				
	Materials	43.1%	40.3%		
	Labour	11.5%	10.6%		
	Overheads	29.6%	28.9%		
		84.2%	79.8%		
	Materials wastage KPI	9.7%	9.7%		
	wastage	656	601	55	9.2%
GP	GP	2475	3106	-631	-20.3%
	GPM	15.8%	20.2%	-4.4%	
DISTRIBUTION		1175	1147	28	2.4%
% of revenue		7.5%	7.5%		
ADMIN		1366	1354	12	0.9%
% of revenue		8.7%	8.8%		
OP	OP	-66	605	-671	-110.9%
	OPM	-0.4%	3.9%	-4.4%	
	<u>Product recall</u>				
	Packs	100			
	Rev per pack	7			
	Total provision	£700			
	OP	-66.0			
	Provision	-0.7			
	Revised OP	-66.7			

REVIEW OF FINANCIAL PERFORMANCE FOR YEAR ENDED 30 SEPTEMBER 2021

REVENUE

Overall revenue increased modestly by £303k (2.0%) to £15,684k which is a poor performance in a market which grows globally at 5% per annum. The rate of growth is slowing (2020: 2.6%). Excluding Taylors, revenue has continued to decrease (£1,608k/12.9%). The number of clients has decreased by 21, causing a decrease in revenue of £383k. There has also been a decrease in the average revenue per client of £1.86k to £16.40k causing a decrease in revenue of £1,225k. The average discount in the year was 32.8% which is higher than 2020 (31.2%). The new products would have had little impact in the current year as they were launched in August and September. There has been an increase in pet ownership as people spend more time at home due to COVID-19.

Revenue from Vets decreased disappointingly by £582k (14.9%) due to the loss of VST following PAW's social media posts. The number of clients has decreased by 10 and there has been a decrease in the average revenue per client of £1.13k to £7.61k. Price-based competition has increased due to concentration of clients.

Pet stores revenue surprisingly decreased by £419k (6.9%) due to PiP stocking competing brands who make similar health claims to DGS. The number of clients has decreased by 7 and there has been a decrease in the average revenue per client of £0.65k to £48.19k. Pet stores still have the highest average revenue per client. The new younger generation of pet owners are more likely to shop online.

Other revenue decreased dramatically by £607k (25.2%) as most sales are made in person and pet owners are increasingly purchasing online. The number of clients has decreased by 4 and there has been a decrease in the average revenue per client of £4.98k to £17.35k. The downward trend has continued (2020: 38.9% decline) and it is still the worst performing channel.

Revenue from Taylors increased impressively by £1,911k (64.7%) due to Taylors expanding its online shopping facilities and recording record growth. Taylors receive a higher-than-average discount (40%) and extended credit terms (90 days), this will have a negative impact on GPM and cash. The continued growth reflects the shift towards mainstream food retailers.

Vets accounts for 21.2% (2020: 25.4%) of DGS revenue, Pets stores account for 36.3% (2020: 39.7%), Other accounts for 11.5% (2020: 15.7%) and Taylors accounts for 31.0% (2020: 19.2%). This shows the increasing importance of Taylors.

COS AND GROSS PROFIT

COS increased by £934k (7.6%) due to an increase in all costs and increased faster than revenue which will have a negative impact on GPM.

Materials increased significantly by £569k (9.2%) due to supply disruption. Wastage has increased by £55k (9.2%) and is still 9.7% which is above the target of 7% and 5% which is considered exceptional. Materials are now 43.1% (2020: 40.3%) of revenue.

Labour increased dramatically by £172k (10.5%) due to overtime and a 4% increase in salaries. Labour is now 11.5% (2020: 10.6%) of revenue.

Overheads increased moderately by £193k (4.3%) due to changing demand and late client orders. Overheads are now 29.6% (2020: 28.9%) of revenue.

GP decreased disappointingly by £631k (20.3%), with a dramatic GPM decrease to 15.8% from 20.2%, due to increased discounts, Taylors accounting for a larger share of revenue and all costs increasing as a percentage of revenue. The continued decline in GPM is concerning and unsustainable.

OPERATING PROFIT
Distribution costs increased by £28k (2.4%) and still account for 7.5% (2020: 7.5%) of revenue which suggests that they have been well controlled.

OP has collapsed by £671k (110.9%) to an operating loss of £66k, with OPM turning negative at 0.4% (2020 OPM: 3.9%). Making a loss is unsustainable and alarming.

PRODUCT RECALL
A provision of £700 should be made for the refund to be made to Happy Pups. Other costs such as collection of products should also be included.

The impact is relatively small and will increase the operating loss to £66.7k.

This is the first time that a DGS product has been subject to a recall. It could be damaging to the DGS brand and result in lost custom.

Ade John has previously raised concerns about how control weaknesses arising from staff shortages could result in an error.

Fortunately, the issue appears relatively minor.

Recommendations
Offer client and affected pet owners compensation as a gesture of goodwill.
Identify cause of issue and implement new procedures.
Ensure production staff are not overworked and have sufficient resource to operate effectively and safely.

CONCLUSIONS
Overall revenue increased modestly by £303k (2.0%) to £15,684k which is a poor performance in a market which grows globally at 5% per annum. Revenue from Vets decreased disappointingly by £582k (14.9%) due to the loss of VST following PAW's social media posts. Pet stores revenue surprisingly decreased by £419k (6.9%) due to PiP stocking competing brands who make similar health claims to DGS. Other revenue decreased dramatically by £607k (25.2%) as most sales are made in person and pet owners are increasingly purchasing online. Revenue from Taylors increased impressively by £1,911k (64.7%) due to Taylors expanding its online shopping facilities and recording record growth.

GP decreased disappointingly by £631k (20.3%), with a dramatic GPM decrease to 15.8% from 20.2%, due to increased discounts.

OP has collapsed by £671k (110.9%) to an operating loss of £66k, with OPM turning negative at 0.4% (2020 OPM: 3.9%).

A provision of £700 should be made for the refund to be made to Happy Pups. Other costs such as collection of products should also be included.

RECOMMENDATIONS
Further analysis of each channel/profit analysis by channel/client.
Take legal action against PAW.
Win more retail clients to increase scale.
Introduce DTC sales via website to improve margins.
Invest in pigging to reduce wastage.

APPENDIX 2: Nu-Dog-Fit

GATEWAY 4		
	£000	
GP Yr 1	10	
GP Yr 2	62	
	72	
Average	36	25.2%
Investment	143	

	2021 Evaluation				
	Predicted	Flexed	Actual	Variance	
Volume: tonnes	137	112	112	-25	-22.3%
£ per KG	4.16	4.16	4.10	-0.06	-1.5%
	£000	£000	£000	£000	
Revenue	570	466	459	-7	-1.5%
Materials	-265	-217	-241	-24	-11.2%
Labour	-48	-39	-46	-7	-17.2%
Production	-131	-107	-110	-3	-2.7%
	-444	-363	-397	-34	-9.4%
GP	126	103	62	-41	
GPM	22.1%	22.1%	13.5%		

	2022	2023	2024	Total
	Predicted	Predicted	Predicted	Predicted
Volume: tonnes (12%/5%)	175	196	206	577
£ per KG	4.00	4.50	4.50	
	£000	£000	£000	£000
Revenue	700	882	926	2508
Materials (2/1.9/1.8)	-350	-372	-370	-1093
Labour	-70	-76	-76	-222
Production	-110	-110	-110	-330
	-530	-558	-556	-1645
GP	170	324	370	863
GPM	24.3%	36.7%	39.9%	34.4%

2021 Revenue	15684		8m	92
2021 Nu-Dog-Fit	-459		12m	138
2021 ex Nu-Dog-Fit	15225			
addition	700			
	4.6%			
2021 GPM	15.8%			

EVALUATION OF NU-DOG-FIT

CONTEXT
As a result of COVID-19, it is possible that pet ownership will increase and the potential market for Nu-Dog-Fit will grow.

The number of young pet owners has increased and selling Nu-Dog-Fit via Taylors has provided DGS with access to this type of customer.

Nu-Dog-Fit was ahead of predictions in 2020 so expectations for 2021 were likely to be high.

RESULTS AND FINANCIAL ANALYSIS: ROI AND 2021 RESULTS
Based on the first two years' trading, ROI is 25.2% which is slightly above the 25% target.

GPM was only 13.5% which is lower than the predicted 22.1% and DGS GPM overall (15.8%).

Volume was 22.3% lower than predicted due to the launch of the rival product. Prior to the launch of the rival product, volumes were on track to reach the predicted 137.

Performance was well below predictions and all amounts were adverse.

The revenue variance was 1.5% adverse due to average revenue being £4.10 per kg rather than 4.16 per kg as predicted. This was probably due to discounting following the rival product being launched in June 2021.

The materials variance was 11.2% adverse due to overproduction and inventories being held. Materials prices have also been increasing.

Labour variance was 17.2% adverse which was a very poor performance and above the increase in labour costs in 2021 for DGS (10.5%).

Production overhead variance was 2.7% adverse due to new variants increasing set up costs.

RESULTS AND FINANCIAL ANALYSIS: EXPECTED REVENUE AND GP
Revenue for the three years starting 1 October 2021 is expected to be £700k, £882k and £926k.

GP for the three years starting 1 October 2021 is expected to be £170k, £324k and £370k with a GPM of 24.3%, 36.7% and 39.9%. GPM for all years is higher than 2021 GPM of 15.8%.

There could be revenue and profits beyond the forecast period. Products usually see a competitor after five years but Nu-Dog-Fit already has a major competitor and appears to have survived.

A dry food range will increase revenues and profits further. Also, the health market appears to be growing so revenue and profits could be increase in future years.

DGS made an operating loss in 2021 and continuing Nu-Dog-Fit will likely result in increased OP.

DGS has cash available of £642k which appears sufficient to continue with Nu-Dog-Fit.

ASSUMPTIONS

The calculation is based on various assumptions and the results will change if the assumptions change.

Volumes could be lower because they have decreased significantly due to the rival product. Also, other rivals could enter the market which would impact volumes further.

However, it appears as though volumes have started to increase as they were higher in the final two months of the year compared with the two months immediately following the launch of the rival product.

Volumes are unlikely to consistently increase because none of DGS's previous product launches saw consistent increases in volume from year 3 onwards.

The 2022 price per kg of £4 appears high because it assumes that there will only be a 20% discount on the £5 RRP. This appears low because current discounts on Nu-Dog-Fit and DGS products are much higher.

The 2023 price per kg appears high because even though they will have less discount, it will take time for DTC sales to make a substantial portion of sales. Most sales will continue to be via Taylors which is at a 40% discount.

Materials costs are likely to be higher because prices increased in 2021 and have increased in all recent years. However, there could be economies of scale as volumes increase.

Labour costs are likely to be higher because they increased in 2021. However, volumes can increase without an increase in costs by scheduling production runs in the most efficient manner possible.

Production overheads are likely to be higher because new variants will increase number of set ups. Also, increased volumes will increase costs.

FACTORS TO CONSIDER

Nu-Dog-Fit has enabled DGS to reach a new, growing customer base. By continuing with Nu-Dog-Fit, DGS can build its reputation with this customer base and launch new products in the future.

Selling Nu-Dog-Fit enhances DGS's brand and reputation for pet health.

DGS has current inventories relating to Nu-Dog-Fit which might be wasted if it not continued. However, it may be possible to use them for other products.

CONCLUSIONS

Based on the first two years' trading, ROI is 25.2% which is slightly above the 25% target.

2021 performance was well below predictions and all amounts were adverse.

Revenue for the three years starting 1 October 2021 is expected to be £700k, £882k and £926k. GP for the three years starting 1 October 2021 is expected to be £170k, £324k and £370k.

Volumes are unlikely to consistently increase because none of DGS's previous product launches saw consistent increases in volume from year 3 onwards. Materials are likely to be higher because prices increased in 2021 and have increased in all recent years.

Nu-Dog-Fit has enabled DGS to reach a new, growing customer base. By continuing with Nu-Dog-Fit, DGS can build its reputation with this customer base and launch new products in the future.

Once the assumptions for the prediction have been verified, DGS should proceed with Nu-Dog-Fit because it passes the Gateway 4 test of ROI in excess of 25% and there is expected growth in revenue and profits.

RECOMMENDATIONS

Research expected impact of dry food range.
Negotiate discounts with clients to see if 20% possible.
Forecast sales mix between clients and DTC to calculate impact.
Increase marketing activities.

APPENDIX 3: New Product Recovery System

		£'000
	Materials saved (W1)	375
	Labour saved	10
	Production OH saved	30
	Depr	-80
	Total saved	335
	New equipment	800
	UEL	10
	Depr pa	80
	Materials saved (W1)	
	Kg recovered per day	1000
	£ per kg	1.5
	Working days	250
		375000
	Profit impact	
	2021 GP	2475
	impact	335
	revised	2810
	2021 OP	-66
	impact	335
	revised	269
	Wastage %	
	Materials 2021	6762
9.7%	current wastage	656
	reduced wastage	-375
	new wastage	281
	new wastage %	4.2%

EVALUATION OF PRODUCT RECOVERY SYSTEM

CONTEXT

COVID-19 could result in supply disruption which could cause cost of materials to increase. This would increase the value of any materials cost saving.

PRC is a highly recommended, market-leading CIP enhancement organisation so appears suitable for the project.

Ade Jones previously raised concerns about contaminated products, control failures and stressed staff and this proposal will help address some of those concerns.

Dog food is heavily regulated so it is important that DGS has comprehensive cleaning and quality control procedures in place.

DGS had its first product recall in 2021 and needs to avoid having a more serious recall.

RESULTS AND FINANCIAL ANALYSIS

The new system will result in a cost saving of £335k per annum.

This is a significant saving as it would turn the current operating loss of £66k to a profit of £269k. The benefit will increase as DGS expands.

DGS does not have sufficient cash (£642k) for the acquisition of new equipment and recovery system so finance may need to be arranged. This will result in an interest expense.

The calculation is based on various assumptions and the results will change if the assumptions change. For example, the value of the benefit looks high compared with Company M who is a medium-sized UK pet food manufacturer. Also, PRC may be biased to make the benefits appear more favourable so that DGS proceeds.

STRATEGIC AND OPERATIONAL ISSUES

Labour time can be spent elsewhere which will increase productivity and capacity. Also, overtime and temporary staff can be reduced.

There will be less pressure on staff which reduces the risk of errors. It also benefits staff welfare as staff should not be highly stressed.

However, some of the underlying causes of production issues (late orders, new products, new clients) will still be present and will not be resolved by the new system.

Cleaning and decontamination will be more thorough which will reduce the risk of a product recall and subsequent damage to DGS brand, as has occurred at PAW.

By using the latest technology, DGS may have an advantage over competitors. At the very least, DGS will not fall behind competitors.

The new equipment will result in less breakdowns, maintenance, and downtime. This will again increase productivity and capacity.

The wastage KPI will reduce from 9.7% to around 4.2% which is below the 7% target and 5% which is considered exceptional.

Some wastage will still occur due to poor production scheduling and spoilage.

ETHICS

The new system will result in less waste because copious amounts of water and chemicals are currently used. This will reduce the environmental impact of operations. Recent media articles and social media posts have been critical of pet food manufactures so this will help improve reputation of the industry and DGS.

PRC works with several of DGS's rivals so there is a risk that confidential information is passed to rivals.

Preet Sharma is seeking to reduce costs so may suggest that the new system is used with existing equipment. However, this has a higher risk of contamination so does not prioritise pet health. Also, the reduced cost savings from lower product recovery may outweigh the cost saving on the new equipment.

DGS is being wasteful by using excess packaging and this is causing environment damage, as well as damage to the DGS brand.

Ade John has commented that Charlie Bailey appears unable to manage Taylors as this is resulting in pressure on the production teams. Hugh Logan raised concerns previously. This appears to be causing frustration amongst non-family members of staff.

There are media reports that PRC is paying companies for positive referrals so recommendations may not be authentic. Reports in the media may not be accurate so need to be verified.

Recommendations

Emphasise actions taken to reduce waste on DGS website.
Ensure NDA signed.
Purchase new equipment rather than use existing.
Reduce package and advertise as eco-friendly.
Provide more support for Charlie Bailey.
Speak directly with referring businesses and inspect their new systems if possible.

CONCLUSIONS

The new system will result in a cost saving of £335k per annum.

Labour time can be spent elsewhere which will increase productivity and capacity. Also, overtime and temporary staff can be reduced.

By using the latest technology, DGS may have an advantage over competitors. At the very least, DGS will not fall behind competitors.

The new system will result in less waste because copious amounts of water and chemicals are currently used. This will reduce the environmental impact of operations. Recent media articles and social media posts have been critical of pet food manufactures so this will help improve reputation of the industry and DGS.

DGS should proceed with the new product recovery system as it will save costs, increase capacity, reduce pressure on staff and reduce the risk of decontamination.

RECOMMENDATIONS

Obtain other quotes for comparison.
Negotiate with PRC.
DD on PRC.
Contact bank regarding loan to purchase equipment.
Set timetable for installation.
Install during downtime.