CASE STUDY

NOVEMBER 2021

ADVANCE INFORMATION

This material is issued prior to the examination session on 3 November 2021.

You MAY bring this material with you to the Exam. It will also be available on your ICAEW Bookshelf.

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DOG GOURMET SUPPLIES LIMITED: ADVANCE INFORMATION

This Advance Information is issued prior to the examination session so as to allow you to familiarise yourself with the information provided and to undertake any other appropriate research and analysis. The Advance Information is also published on the website: www.icaew.com/students.

You MAY bring this Advance Information with you to the Examination Hall, annotated if you wish, together with any other notes of your preparatory work. You must carry out sufficient and appropriate analysis work **of your own** in order to have a detailed understanding of the Advance Information. You should also undertake any additional research and analysis you feel necessary to enhance your awareness of the industry and market context and to enable you to clarify any technical terms or other issues of vocabulary. You will need to be able to refer back quickly to the Advance Information and your notes during the exam; you are therefore unlikely to benefit from taking large quantities of additional material with you into the Examination Hall.

At the start of the examination you will receive some additional material which will complete the description of the case scenario and state the Case Study requirements. Your answer must be submitted on the CBE software provided by ICAEW in the Examination Hall.

Assessment of the Case Study

The marks in the Case Study are awarded for professional skills, allocated broadly as follows:

• Assimilating and using information	22.5%
• Structuring problems and solutions	22.5%
• Applying judgement	22.5%
• Drawing conclusions and making recommendations	15.0%
• Demonstrating integrative and multidisciplinary skills	17.5%

Of the total marks available, 15% are awarded for the executive summary and approximately 10% for the relevant discussion of ethical issues within your answer to the requirements. Ethical issues do not form a specific requirement but, within a requirement, may cover such topics as:

- Lack of professional independence or objectivity
- Conflicts of interest among stakeholders
- Doubtful accounting or commercial practice
- Inappropriate pressure to achieve a reported result.

You should be clear that marks are awarded for demonstrating your professional skills, not for reproducing facts from the case. In order to be successful, you will need to:

- Demonstrate your knowledge of the case material and make use of your preparatory work;
- Carry out relevant analysis of the problems and structure your proposed solutions;
- Apply your judgement on the basis of the analysis that you have carried out; and
- Draw conclusions from your analysis and judgement, and develop them into practical commercial recommendations.

Omitting any one of these elements will have a significantly detrimental effect on your chances of success.

November 2021 Case Study: Dog Gourmet Supplies Limited

List of exhibits

About you (Jace Moon) and your employer (Oakley Dunstable)

You are Jace Moon, a final-year trainee ICAEW Chartered Accountant, working in the business advisory unit of Oakley Dunstable (OD), a firm of ICAEW Chartered Accountants located in the county of Worcestershire in England.

One of your clients is Dog Gourmet Supplies Limited (DGS), a dog food manufacturing and wholesaling company located on the outskirts of Droitwich Spa, a town around 200 kilometres north-west of London in the county of Worcestershire. DGS operates from one site which contains its head office, the food manufacturing and packaging facility and warehouse. Its clients, all based in the UK, are mainly veterinary practices, specialist pet stores and a high street grocery retail chain. You report to Val Williams, a partner in the business advisory department of OD.

Since you joined OD, your work has included:

- Reviewing the management accounts and financial statements of clients to identify trends and key issues, enabling clients to make informed decisions about their business
- Performing financial data calculations, including project evaluation analysis, and further financial analysis for clients to assist the consideration of any business opportunities
- Preparing financial and numerical calculations for clients, considering any assumptions provided with a critical professional review to enable the impact of future business decisions to be properly assessed
- Offering clear evaluations to clients based on analysis of both opportunities and threats, and the impact of both on profitability
- Drafting reports for clients on all financial and commercial aspects of their business.

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The UK pet food industry

History and overview

The modern use of manufactured pet food is attributed to James Spratt from Ohio (USA), who first manufactured dog biscuits from meat, vegetables and cereal around 1860. The first canned foods for dogs were produced half a century later in the USA by the Chappel brothers, who sold their UK production facility (and Chappie brand) to Mars Inc. in the early part of the 20th century. During the Second World War, when metal and meat were rationed, production of canned foods just for animals became problematic. Dog food manufacturers became more creative in developing processes and technology; by 1956, a cooking process was in use which allowed a high volume of shelf-stable (that is, able to be safely stored at room temperature) foodstuffs to be manufactured.

The market for pet food (which is primarily for dogs and cats) expanded around this time and, over the years, pet food sales have consistently increased: the global market is currently worth approximately £100 billion and growing at an average rate of 5% pa. The UK market for manufactured pet food is forecast to reach over £3 billion by 2022 and the dog food market makes up approximately half of this.

There are a number of drivers of this growth: an increase in pet ownership, with pet food being an essential item for pet owners; a tendency for owners to reflect their own lifestyle onto their pets (health and dietary preferences) and to treat their pets like humans; and increased pampering of pets. Scientific advances in pet nutrition and food technology, combined with increasing demand for specialised pet food, have enabled the industry to develop and diversify, with pet foods becoming increasingly sophisticated in terms of production and product offering.

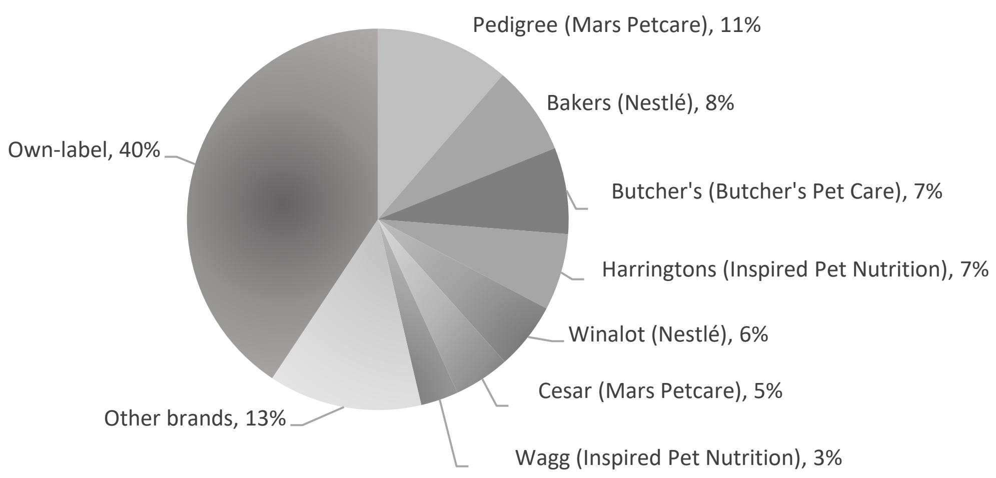
The UK pet food market

There are approximately 100 companies that manufacture pet food in the UK, and most of them are members of the Pet Food Manufacturers Association (PFMA). In the UK, pet food manufacturers make a range of foods for pets, the vast majority of which are dogs and cats but they also include horses, birds, fish, rabbits, reptiles, amphibians and other animals.

Ownership of pets in the UK is high, with 59% of households owning a pet of some kind, one-third of households owning a dog and over a quarter owning a cat. Pet ownership rose by around 10% during late 2020 and early 2021, the result of an increased demand for the companionship and diversion that a pet provides. According to the PFMA, young people are the main drivers of this change, with more than half of new owners being aged 16 to 34.

The pet food manufacturing industry is dominated by a few large companies. Typically, these are vertically integrated manufacturing businesses which benefit from substantial economies of scale with respect to manufacturing, distribution and marketing. The seven largest brands, owned by the four largest manufacturers, account for just under half of the UK dog food market.

% share of UK dog food market



The sector continues to experience merger and acquisition activity, as companies seek to achieve greater economies of scale. The large manufacturers also pursue economies of scope, with the very largest each having a number of dog food brands.

Whilst the main manufacturers are large organisations, the market size and growth together provide opportunities for smaller manufacturers to cater for specialist niches, for example higher-income bracket customers who can afford to pay more for high-quality or innovative products.

The raw materials used in pet food manufacture are largely produced by very large global food processing companies, which supply processed ingredients (eg, meat, fish, cereals, vegetables, additives and supplements) to the food and beverage industry generally, of which the pet food sector forms a part. The meat ingredients used are typically animal by-products of the human food industry. Whilst, in principle, meat by-products are suitable for human consumption, for a variety of reasons, they are considered surplus to the requirements of the human food supply chain.

Channels to market

Most pet food (including dog food) sales in the UK reach consumers via the large supermarket chains. There are, however, additional channels to market that pet food manufacturers can use, such as veterinary (vet) practices, specialist pet stores, local breeders and garden centres.

These channels have also shown increasing levels of concentration, with many vet practices merging and forming collectives, as well as being acquired by other organisations. There are thousands of vet practices in the UK, of which around 30% are owned by large corporations (including the large pet food manufacturers), 20% are smaller chains of vet practices, and the remaining 50% operate independently.

A similar trend has taken place in the specialist pet store market over the last few years, with the formation of some very large chains. For instance, Pets at Home with over 400 UK stores is the largest, followed by Pets Corner and Pets Hut, which together operate another 200 stores. Pets at Home also operates over 50 vet practices. The UK pet store sector is still fragmented, however, with hundreds of independent retailers.

A more recent development is the increase in sales from pet food manufacturers via digital channels, either through the websites of supermarket chains and specialist pet food retailers or through those of purely online pet food retailers. The five largest UK online pet food retailers' sales make up approximately 10% of the overall UK pet food market. The advent of e-commerce has also allowed business-to-business (B2B) organisations such as pet food manufacturers to retail their own brands Direct-To-Customer (DTC).

Dog food market segments by product

Manufactured dog food can be divided into three broad product types:

- Wet food: pet food in a gravy or jelly, typically sold in a can, tray or pouch.
- Dry food: pet food in a low-moisture biscuit form known as kibble, typically sold in a bag or box.
- Treats and snacks: used to supplement main pet food diets.

Dog food can be further segmented, for example by age of pet (puppy, adult), by size of breed (small, medium, large) or by specific health and dietary needs.

Dog Gourmet Supplies Limited (DGS): An overview

DGS: History and development

DGS is a family-run business founded by Stephanie Bailey. Stephanie grew up on a farm, and it was her involvement in training and raising working farm dogs that created in her a lifelong love of dogs. Her skill at training dogs meant that she ran displays of trained working dogs at shows around the UK, often winning prizes. Stephanie was aided by her husband Harold Bailey, a vet. Stephanie's skills in breeding and training dogs combined well with Harold's veterinary training and created a synergy that benefited both of their businesses.

By breeding and training healthy working dogs, Stephanie found that the foodstuffs being provided by the major manufacturers at the time were geared more towards creating successful brands to support high-volume sales than towards delivering a high-quality diet for dogs with specific dietary needs. After repeated difficulties in getting pet food manufacturers to supply at a suitable price the products that she was asking for, she decided to start manufacturing her own specialised dog foods to meet the specific high-energy requirements of working dogs.

It became apparent early on that there was also a demand for dog food which focused on helping dogs with specific health concerns, eg, allergies, convalescence, pregnancy / post-pregnancy and weight issues. In the early stages of Stephanie's business, most sales were by word of mouth, owing to Stephanie's success and reputation as a dog trainer. Harold's links with colleagues via the local veterinary society of which he was a member also helped generate growth for the business. As a consequence, Stephanie and Harold were able to establish supply arrangements with a number of local vet practices and pet stores.

DGS was set up in 1970 as a family business, operating initially out of farm buildings owned by Stephanie's parents. Over the years, it has grown into a well-established and highly-regarded dog food producer, manufacturing wet and dry food as well as treats.

Stephanie and Harold were initially joined in the business by their sons William and Louis. More recently, Louis' children Charlie and Annie have also joined DGS. Charlie, who has completed a degree in management and marketing, has joined the sales and business development team after a year working for a digital marketing agency; and Annie, who has a degree in food science, has joined the product research and development team.

Stephanie has always had a very hands-on involvement in the business and has been very emphatic that DGS stay loyal to the initial values that gave rise to it. Over the last few years, however, she has had to deal with increasing personal health issues and now, as she approaches her 80th birthday, she has recognised that she needs to step back from the business and let her children and grandchildren take it over more fully.

The DGS senior management team comprises:

Stephanie Bailey	Founder, Chair* and CEO
William Bailey	Director responsible for procurement and inventory
Louis Bailey	Director responsible for sales, business development and product research
Ade John	Director responsible for manufacturing and operations
Preet Sharma	Director responsible for finance and IT

* Harold retired from the business as Chair in 2010 owing to ill-health and Stephanie has held the role since then. The Bailey family are the only shareholders of DGS. Ade John and Preet Sharma are not family members.

The philosophy of DGS is centred on providing nutrition for dogs "as if pets were people". In context, this means ensuring that the quality of ingredients, of formulations and of processing is at the same standard as it would be for human-grade food.

Given the emphasis on pet health, Stephanie has always made it clear that DGS pet food should avoid common dietary allergens, as well as using only natural preservatives and colourings.

Customers

DGS is a UK manufacturer and wholesaler. It does not, to date, sell directly to pet owners but rather its channels to market are through a network of retail clients: vets, specialist pet stores, dog breeders and garden centres. In addition, DGS has recently begun selling through an up-market UK-wide grocery retail chain, Taylors.

Having created very respected dog food products and a brand that is strongly associated with pet health, Stephanie has always been adamant that the business is highly selective about which retailers it works with, so that the differentiated nature of its products is maintained and ideally enhanced. To support this, DGS has wherever possible entered exclusive supply arrangements, such that DGS's retail clients do not stock other brands of dog food. However, with the merger and acquisition activity occurring in DGS's main channels to market, exclusive arrangements are becoming increasingly difficult to set up and maintain.

DGS's ability to sell is reliant on developing and maintaining relationships with its clients. Therefore, whilst DGS has a website, historically there has been no perceived need for it to have any shopping facility for the general public. Rather, the website is used mainly as an information source, allowing DGS to explain the health advantages of DGS pet food; promote its relationships with vets and breeders to further differentiate its products; and direct interested dog owners to their nearest retailer of DGS products. The directors are aware that the DGS website is not currently as high-profile as they would like it to be (see **Exhibit 14**). The website also offers retailers the opportunity to apply to become a DGS business partner. Stephanie has always insisted that DGS carry out a review of any potential new retailers that apply to become a partner, and DGS requires any potential retailer to sign a non-disclosure agreement (NDA) before discussing any discounts (see **Exhibit 6**).

Operations

The business operates from land and buildings that were part of the farm that Stephanie's parents owned. Stephanie inherited the farm from them and sold off much of the land to neighbouring farmers.

The original farm buildings were combined with an industrial unit that was built in 1995 and which has been further developed and extended over the years as requirements dictated. The plant and equipment similarly have been added to as the business has grown. The facility operates a number of production lines for manufacturing and packaging the various dog food products sold. There are some storage facilities on site, used to hold packaging and consumables, raw materials and finished goods. The opportunity to expand storage capacity on site is limited. A critical issue for DGS is to ensure that production capacity is utilised as efficiently as possible (see **Exhibit 9**).

DGS is extremely selective over the ingredients used in its dog food. It excludes dairy items, other common allergens and artificial additives from its ingredient range. DGS also requires its suppliers to be able to provide evidence that confirms the source of the ingredients supplied to DGS (see **Exhibit 12**).

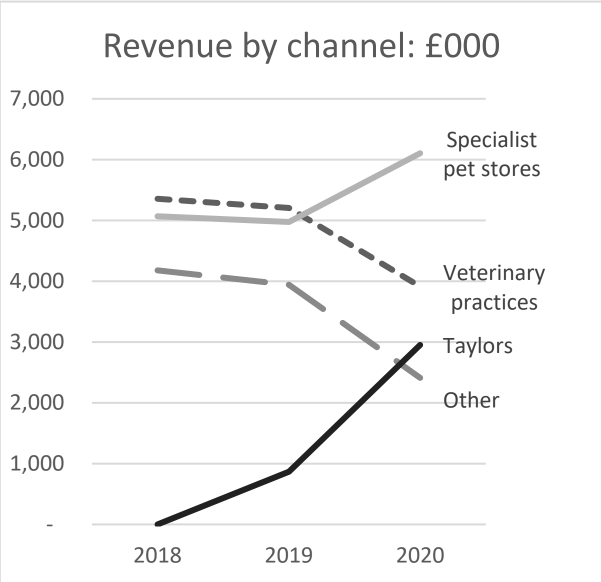
Product research and development team

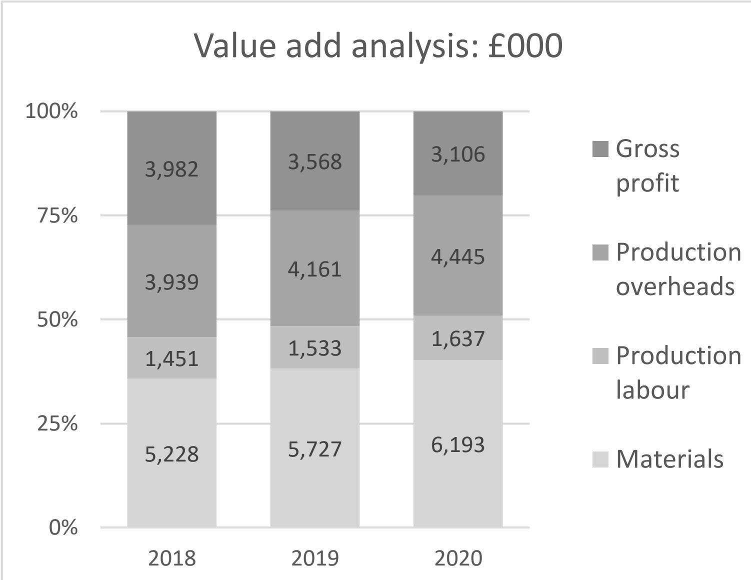
Product launches are a regular feature for DGS, as for many companies in the sector. DGS employs a team of nutritionists who are responsible for researching and developing dog food recipes that meet specific health and dietary needs. They work with the market insights from the sales and business development team in identifying pet owners' demands. Product launches follow a process that has been developed and refined over many years. This process includes decisions at key stages in a new product's lifecycle, based on a financial evaluation (see **Exhibit 13**).

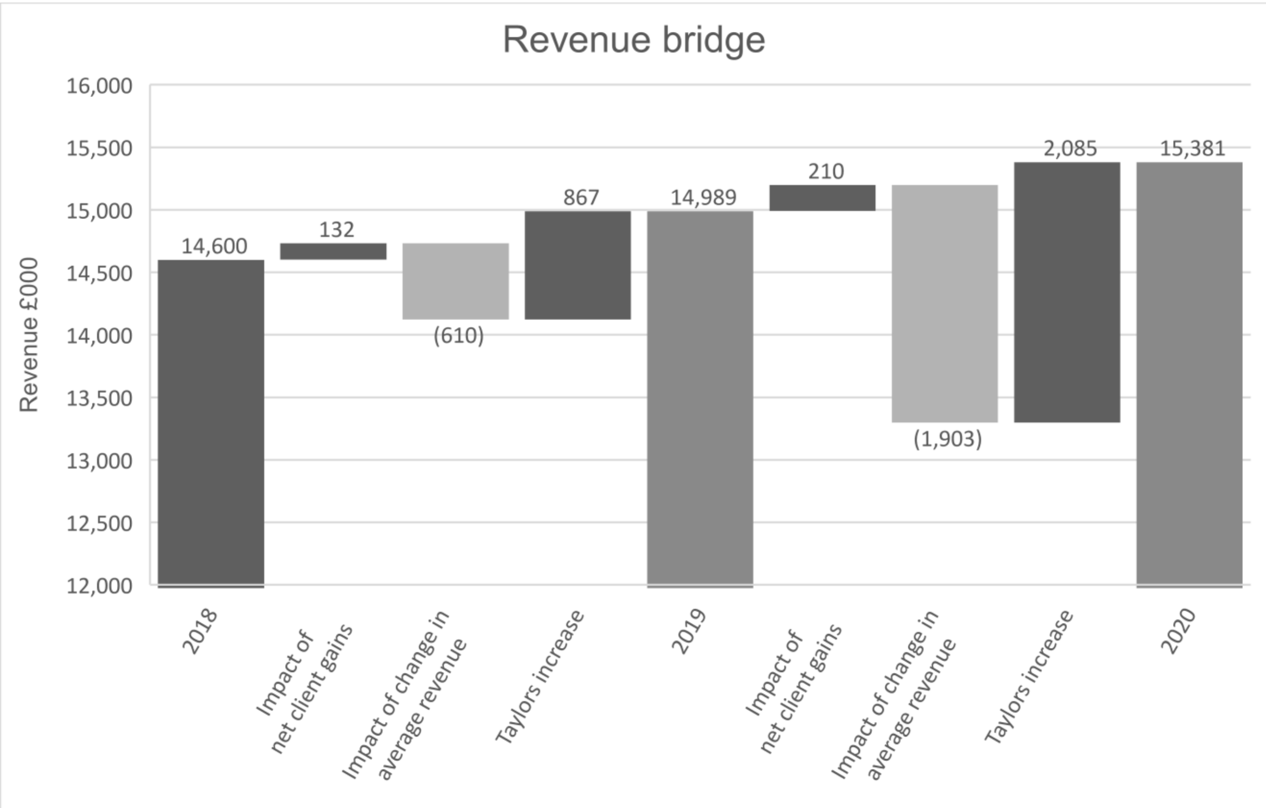
DGS: Review of the management accounts for the three years ended 30 September 2020 (prepared by Preet Sharma, 23 October 2020)

I have attached the management accounts for the three years ended 30 September 2020 (**Exhibit 5**). These are for our internal use to enable us to manage the business. Relevant notes set out the policies adopted in their preparation. I have also set out below the management dashboard that provides the board with an at-a-glance overview of the company's financial performance in each year. The review that follows covers the key issues arising in each year as identified at the time.

DGS Limited management dashboard







Year ended 30 September 2018 (2018)

This year saw a small increase in total revenue of just over 1% to £14,600k, although this change hides a busy year in terms of client wins and losses.

The ongoing concentration in the pet food retail sector – in particular, vets and pet food specialist stores – continues to create challenges for us, and 2018 saw a number of our established vet clients leave us. Two of our medium-sized clients decided to join forces with the Independent Vet Practice (IVP) consortium. IVP has existing commercial arrangements with one of the large pet food manufacturers and some of our clients were no longer able to stock our products and consequently served notice to terminate their contracts with us. In addition, we suffered the loss of Pets Vets Ltd (PVL). PVL is a well-known vet practice with a large chain of surgeries and the DGS range was the only health-based dog food that PVL stocked. PVL's success made it an acquisition target, and it was bought by one of the market-leading vet practice chains which, in turn, is owned by one of the large pet food manufacturers, which instructed PVL to cease stocking our products. The effect of these vet client losses was a drop in revenue of almost £800k.

There was, however, some good news in 2018. The two months' notice from departing clients gave our sales and business development team time to respond to these losses by accelerating the recruitment of several smaller independent vet practices with which they had been developing relationships. These clients were signed up as retailers for DGS products, although only after being offered more generous discounts than we would ordinarily agree for clients of this size. Our sales KPI of average revenue per client was £21.95k in 2018.

In addition, we had two significant client wins during 2018: the Veterinary Support Trust (VST) and Pets in Paradise (PiP), a specialist pet chain. These clients were encouraged to become DGS stockists by our new sales and business development team member, Hugh Logan. Hugh was previously employed by another pet food manufacturer, Pet Alliance Wholesalers (PAW).

The combined effect in revenue terms of these changes has left overall revenue largely flat. However, discounts offered are starting to increase, which is having an adverse impact on gross profit.

Materials costs at £5,228k were in line with expectations. Materials wastage averaged 6.3% of total materials used for the full year and amounted to £329k. This was better than the 7% target, indicating that production scheduling was well managed. Materials wastage % is a DGS manufacturing KPI. Production labour (£1,451k) and production overheads (£3,939k) were in line with expectations. Cost of sales totalled £10,618k, resulting in a gross profit of £3,982k and a gross margin of 27.3%.

Year ended 30 September 2019 (2019)

The most notable new client in 2019 was the up-market national grocery retail chain, Taylors (see **Exhibit 7**). After many months of negotiation, Taylors and DGS signed an agreement in November 2018, effective from 1 January 2019. The first nine months of trading with Taylors resulted in revenue of £867k. DGS's total revenue in 2019 rose to £14,989k, an increase of £389k or 2.7% over 2018 (£14,600k). Sales to Taylors contributed significantly to this increase, making up 5.8% of DGS's total revenue, even with the 40% discount that it receives from us.

Excluding Taylors, total revenue showed a drop of £478k as a result of the competitive pressures we are facing in our usual channels (vets, specialist pet stores and other). Whilst there was a net increase of six in the number of clients (a sales KPI) from 665 to 671, this masks the number of clients that we lost. Winning new clients – and indeed retaining existing clients – is increasingly difficult and even for smaller clients we need to offer larger discounts. 2019 saw average revenue per client drop from £21.95k to £21.05k (this average excludes revenue from Taylors, because of its distortive effect).

The impact of the two sales KPIs can be seen in the revenue bridge: the net gain of six clients generated a £132k revenue increase (6 x £21.95k average revenue per client at 2018 levels), but this was more than offset by a fall in revenue caused by the drop in average revenue per client. This amounted to £610k (671 clients x [£21.05k* - £21.95k*]); the overall impact being £132k - £610k* = £(478k).

* The averages are rounded, causing a small reconciliation difference

March 2019 also saw the soft launch of the Nu-Dog-Fit product range (**Exhibit 13**). Sales during a soft launch are typically low and so, while Nu-Dog-Fit generated revenue of only £37k, early responses are very positive.

Cost of sales rose by £803k (7.6%) to £11,421k. This, combined with the £389k increase in revenue, meant that gross profit was £3,568k, £414k lower than in 2018. The gross margin was reduced from 27.3% to 23.8%.

The increase in costs was primarily driven by materials, which rose by £499k (9.5%) from £5,228k in 2018 to £5,727k in 2019. This was largely due to increased materials wastage, which rose to £504k. The materials wastage KPI rose from last year's average 6.3% to 8.8% in 2019. This was due to an increased number of production runs, which in turn was partly due to the Nu-Dog-Fit soft launch, and also a result of unexpected client orders, requiring short-term changes in production scheduling. The rest of the materials cost increase was due to production volume increases and price rises from suppliers.

Production labour costs increased over the period from 9.9% to 10.2% of revenue. Whilst labour is not the key driver of cost of sales for our manufacturing business, and the total increase of £82k from £1,451k in 2018 to £1,533k in 2019 was small in absolute terms, this increase was unexpected, given that the annual salary increase was just 2%. The production department is typically able to take account of volume increases without a commensurate increase in costs by scheduling production runs such that the manufacturing plant is used in the most efficient manner possible. However, the changing mix of clients, new products and changing demand from pet owners are creating unexpected production scheduling, and for 2019 this resulted in a 3.5% increase in production hours.

The complexities in the business have impacted production overheads more dramatically. Higher volumes, a changing client base, new product variants and changing demand from pet owners have all combined to drive production overheads up to £4,161k, £222k above 2018 levels (£3,939k).

Year ended 30 September 2020 (2020)

Revenue in this period was £15,381k, £392k (2.6%) higher than the £14,989k achieved in 2019. The main driver of growth was again Taylors, which generated £2,952k of sales, a £2,085k increase over the £867k received during the first nine months of trading in 2019 and making up 19.2% (2019: 5.8%) of our total revenue.

Almost 20% of Taylors' own total revenue is generated through its website. Assuming that DGS products are purchased by Taylors' customers in a similar fashion to the rest of their grocery purchases, this implies that approximately £590k of DGS dog food sold through Taylors was purchased online by pet owners. We also saw an increase of £1,130k in revenue from specialist pet stores, mainly those with a well-developed online platform to complement their physical store network. These benefited from pet owners increasingly switching their purchasing behaviour to online. Unfortunately, sales through other channels (eg, vets and other clients) showed a combined decrease in revenue of £2,823k, as these channels rely more on customers visiting their physical locations for sales.

An analysis of the revenue change (summarised on the revenue bridge) shows that the net increase of ten new clients at 2019 levels should have contributed £210k to revenue (10 x £21.05k*). However, the increased competitive rivalry in our wholesale markets caused further pressure on discounts, resulting in a reduction in average revenue per client (excluding Taylors) from £21.05k* to £18.25k*. This, combined with the difficulty in winning larger clients, resulted in a drop in revenue of £1,903k (£18.25k* - £21.05k*) x 681 clients), the overall impact being £210k - £1,903k* = £(1,693k).

* The averages are rounded, causing a small reconciliation difference

The revenue increase of £2,085k from Taylors more than made up for the £1,693k drop.

October 2019 also saw the official launch of Nu-Dog-Fit. The first year's results are highly encouraging, with revenue of £250k on a sales volume of 60 tonnes (1 tonne = 1,000 kg). Average revenue was £4.17/kg, which was higher than the average revenue for existing DGS products, showing the premium price point for Nu-Dog-Fit.

The uptake by customers is evidence that we are accessing different types of buyers, given that the product is designed to appeal to a broader pet-owning segment than our typical pet food customer profile. Many of our established clients (vets and garden centres in particular) would not ordinarily have given us access to this new customer segment, and it is apparent that the growth is driven by Taylors and by access to other online channels. During 2020 we have benefited from the increase in pet ownership by a wider demographic of the population. This has helped the launch of Nu-Dog-Fit, as well as improving sales of our existing products.

Total cost of sales across the business rose by £854k (7.5%) from £11,421k to £12,275k. Combined with only a £392k increase in revenue, this resulted in a drop of £462k (12.9%) in gross profit from £3,568k to £3,106k. Consequently, 2020 saw a reduced gross margin of 20.2%.

The increase in costs was once again primarily driven by materials, which rose by £466k from £5,727k to £6,193k, an increase of 8.1%.

There was a further worsening of the materials wastage KPI, which increased to an average of 9.7% of total materials costs during 2020 (2019: 8.8%), representing a total wastage figure of £601k compared to £504k in 2019. This contributed £97k (£601k - £504k) to the £466k increase in materials costs.

The increase in the wastage KPI was due again to an increased number of production runs, in part resulting from the official launch of Nu-Dog-Fit but mostly due to further increases in unscheduled production runs arising from unexpected order patterns, both from new clients and from changing demand among pet owners.

The rest of the materials costs increase was largely due to the increase in input volume needed to support the increase in sales and increases in the price of ingredients passed on by suppliers.

Production labour costs showed a greater increase in 2020 than the 5.7% increase in the prior year, rising from £1,533k by £104k (6.8%) to £1,637k. This was principally caused by a 5% increase in the number of production hours together with the 2% annual salary increase for production staff which took place in October 2019.

Production overheads at £4,445k were 28.9% of revenue (2019: 27.8%) and showed an increase of £284k (6.8%). This was again due to the further increased complexities in the business impacting production scheduling: higher volumes, changing client base, new product variants and changing demand from pet owners.

DGS: Management accounts for the three years ended 30 September 2020

Statement of profit or loss for years ended 30 September

	Note	2020	2019	2018
		£000	£000	£000
Revenue	1	**15,381**	**14,989**	**14,600**
Cost of sales	2	(12,275)	(11,421)	(10,618)
Gross profit		**3,106**	**3,568**	**3,982**
Distribution costs		(1,147)	(1,102)	(1,032)
Administrative expenses		(1,354)	(1,292)	(1,289)
Operating profit		**605**	**1,174**	**1,661**
Net finance expense		(105)	(105)	(105)
Profit before taxation		500	1,069	1,556
Income tax		(95)	(203)	(296)
Profit for the year		**405**	**866**	**1,260**

Statement of financial position at 30 September

	Note	2020	2019	2018
		£000	£000	£000
Non-current assets				
Property, plant and equipment (PPE)	3	2,490	2,803	2,948
		2,490	**2,803**	**2,948**
Current assets				
Inventories	4	1,623	1,409	1,223
Trade and other receivables	5	1,913	1,689	1,457
Cash and cash equivalents		1,329	1,570	1,523
		4,865	**4,668**	**4,203**
TOTAL ASSETS		**7,355**	**7,471**	**7,151**
Equity				
Ordinary shares		5	5	5
Retained earnings		4,262	4,357	3,991
		4,267	**4,362**	**3,996**
Non-current liabilities				
5% bank loan	6	2,100	2,100	2,100
Current liabilities				
Trade and other payables	7	893	806	759
Taxation		95	203	296
		3,088	**3,109**	**3,155**
TOTAL EQUITY AND LIABILITIES		**7,355**	**7,471**	**7,151**

Statement of cash flows for years ended 30 September

	2020 £000	2019 £000	2018 £000
Cash flows from operating activities			
Profit before taxation	500	1,069	1,556
Adjustments for:			
Depreciation	368	373	342
Profit on disposal of PPE	(71)	(5)	(8)
Finance expense	105	105	105
	902	1,542	1,995
Change in inventories	(214)	(186)	(143)
Change in trade and other receivables	(224)	(232)	(143)
Change in trade and other payables	87	47	10
	551	1,171	1,719
Income tax paid	(203)	(296)	(297)
Net cash generated from operating activities	**348**	**875**	**1,422**
Investing activities			
Acquisition of PPE	(104)	(239)	(372)
Proceeds from disposal of PPE	120	16	15
Net cash generated (used)/from investing activities	**16**	**(223)**	**(357)**
Financing activities			
Interest paid	(105)	(105)	(105)
Dividends paid	(500)	(500)	(500)
Cash flows used in financing activities	**(605)**	**(605)**	**(605)**
Net change in cash and cash equivalents	**(241)**	**47**	**460**
Cash and cash equivalents at start of period	1,570	1,523	1,063
Cash and cash equivalents at end of period	**1,329**	**1,570**	**1,523**

Notes to the management accounts

Note 1: Revenue by channel

	2020 £000	2019 £000	2018 £000
Veterinary practices	3,913	5,204	5,356
Specialist pet stores	6,105	4,975	5,066
Other	2,411	3,943	4,178
Taylors	2,952	867	-
	15,381	**14,989**	**14,600**

Note 2: Cost of sales by category

	2020 £000	2019 £000	2018 £000
Materials	6,193	5,727	5,228
Production labour	1,637	1,533	1,451
Production overheads	4,445	4,161	3,939
	12,275	**11,421**	**10,618**

Note 3: PPE

Cost	£000
1 October 2017	5,344
Additions	372
Disposals	(36)
1 October 2018	5,680
Additions	239
Disposals	(45)
1 October 2019	5,874
Additions	104
Disposals	(190)
1 October 2020	5,788
Depreciation	
1 October 2017	2,419
Charge for the year	342
On disposals	(29)
1 October 2018	2,732
Charge for the year	373
On disposals	(34)
1 October 2019	3,071
Charge for the year	368
On disposals	(141)
1 October 2020	3,298
Carrying amount	
1 October 2017	2,925
1 October 2018	2,948
1 October 2019	2,803
1 October 2020	2,490

Note 4: Inventories

	2020	2019	2018
	£000	£000	£000
Packaging and consumables	355	308	267
Raw materials	733	637	553
Finished goods	535	464	403
	1,623	**1,409**	**1,223**

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

Note 5: Trade and other receivables

	2020 £000	2019 £000	2018 £000
Trade receivables	1,686	1,478	1,284
Other receivables and prepayments	227	211	173
	1,913	**1,689**	**1,457**

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

	2020 £000	2019 £000	2018 £000
Trade payables	545	464	422
Other payables	348	342	337
	893	**806**	**759**

DGS: Sales and business development

Marketing, sales and business development

Louis Bailey leads a sales and business development team comprising:

- Hugh Logan: joined DGS in 2018 after leaving a rival manufacturer Pet Alliance Wholesalers (PAW), bringing two significant clients with him, the Veterinary Support Trust (VST) and Pets in Paradise (PiP)
- Suzanne Coder: recruited by Stephanie Bailey almost 30 years ago
- Sayali Patel: joined DGS directly from university 12 years ago
- Charlie Bailey: recently joined.

The wholesale nature of DGS's business means that winning new clients requires the creation of business relationships. Potential clients will typically need to be assured that any new pet food product will be well received by dog owners, and that DGS can be relied upon to deliver as required when orders are placed.

Such relationships can take time to establish and build, and business development is often slow. The challenge is to win new clients without sacrificing margin in the form of discounts. Clients have tended to stay with DGS, as they have found that pet owners would pay a premium price for the superior quality of DGS's dog food, thereby enhancing the clients' own margins. The recent acquisition activity in DGS's channels to market has changed this, creating increased price-based competition.

Marketing activities are used to support business development activities and, whilst responsibility for marketing is shared amongst the team, Louis has led on it in the past. Louis has recently begun to delegate this responsibility to Charlie.

Team performance assessment

Hugh, Suzanne and Sayali each have responsibility for a territory of approximately one-third of the UK by geographical area (Northern, Southern and Midland), as determined by Louis Bailey. The assessment of individual team member performance is based on the sales KPIs (average revenue per client and net increase in number of clients), as well as achieving a total revenue target for their territory.

The merger and acquisition activity in the vet practice and pet store sectors – DGS's main channels to market – is increasing the competitive rivalry within these sectors, making it more difficult for DGS to attract clients, as well as triggering client losses. Whilst the number of clients is increasing overall, the average revenue per client is decreasing, as shown below:

Channels	**Number of clients as at 30 September**		
	2020	**2019**	**2018**
Veterinary practices	448	445	441
Specialist pet stores	125	121	118
Other	108	105	106
Total	**681**	**671**	**665**
Average revenue per client (£000)	18.25	21.05	21.95

Average revenue per client is calculated by reference to the number of clients at the end of each financial period. In addition to the above channels, there is a single large client (Taylors), which is excluded from those looked after by Hugh, Suzanne and Sayali. It is managed directly by Charlie with guidance from Louis. Consequently, average revenue per client excludes any revenue from Taylors, and Charlie is not included in the same bonus calculation as the rest of the team.

Individual targets and commission (2020)

Hugh, Suzanne and Sayali each have the same total revenue target but, given the differences in the UK areas assigned, they have some flexibility on the level of discount, credit terms and dispatch arrangements that they can offer to their own clients, within parameters set by Louis. Any exceptions need to be agreed in advance with him. All new clients are assessed by the team to ensure that brand positioning of any new client is consistent with DGS's own differentiated brand. The finance team also carry out due diligence on any prospective new client, including the use of a credit rating agency.

The changes in DGS's markets have created significant challenges in achieving the sales KPIs. These changes, combined with the impact of the Taylors account, have created some discontent within the team. Data relating to 2020 is as follows:

Team member	**Revenue target**	**Actual revenue**	**Clients**	**Average revenue per client**	**Area**
	£000	**£000**	**Number**	**£000**	
Hugh Logan	4,200	3,618	321	11.27	Northern
Suzanne Coder	4,200	4,575	139	32.91	Southern
Sayali Patel	4,200	4,236	221	19.17	Midland
	12,600	**12,429**	**681**	**18.25**	
Charlie Bailey	2,952	n/a	1		n/a

<u>Extracts of comments from team meeting held 12 April 2021</u>

Hugh Logan: These KPIs don't make any sense. The clients are all different sizes so we can't be meaningfully compared one against another, and different territories have different-sized cities, so the chance of a big client win depends on where we get allocated.

The two big clients that I brought from PAW are not in my area even though some of their stores are – you just gave them to Suzanne because their head offices are based in the Southern area but they phone me all the time. I'm having a lot of conversations with both of them on operational issues. They are complaining about the quality of service, claiming that sometimes deliveries are late or incomplete. They say that DGS does not understand their needs whereas PAW did and that they want me looking after them.

The commission system is just not fair – I have been asking to get this changed since I joined. I have been told repeatedly that it will be improved but nothing has happened. I think it would make more sense to split the work by channel to market or even product range rather than by geography.

And why has Charlie, the newest member of the team, got Taylors? It's our biggest client.

I have won lots of new smaller clients, but with the changes in the market (lots of new pet owners), my little clients are finding that they never know what to order and everything comes through at the last minute. That is putting the production team under a lot of pressure, by the way – it is not keeping up, and that creates a lot of risks in my view. It also means that the bigger clients get preferential treatment.

Suzanne Coder: The bigger clients take a lot more looking after; the little ones are easier. The bigger ones also take more experience, and I've been doing this the longest, so it makes sense that I should have the biggest clients. My clients increasingly change their minds too, but so far the production team is keeping up. However, there is always the worry that a demanding client could create pressures in the production team, potentially leading to a serious incident.

Sayali Patel: I don't mind. Big or small clients – they all need to be looked after. Anyway, the total revenue target we each have is the same overall. I do agree with Hugh, though – clients keep changing their minds on orders with very little notice.

DGS: Marketing update – briefing notes on key clients (extract)

From: Louis Bailey
To: Board of directors
Cc: Production team, sales and business development team, procurement team, finance team
Date: 5 July 2021

Introduction

The strong relationships between DGS and our clients in key channels (specialist pet stores and vet practices) has for many years helped support our underlying, highly-differentiated brand strength, which focuses on the health of dogs. However, the takeover activity in the vet practices and pet store sectors has created significant challenges for us. Over the last couple of years, therefore, we have been exploring a shift away from our selective pet-oriented outlets to more mainstream food retailers.

Synopsis of recent major client wins

Taylors: You will, I am sure, remember the excitement in November 2018 when we signed a supply contract with the national grocery retailer Taylors. To recap, Taylors has nearly 250 large stores and over 650 smaller stores and "convenience" shops in city centres and transport hubs.

Taylors has an 'up-market' reputation and currently has a significant share of the UK groceries market. Taylors sells its own-brand dog food, as well as dog food products from DGS's competitors, offering a variety of quality and price points. Given its target market, however, it does not sell very cheap dog food.

Advertising for Taylors tends to focus on its unique selling points – the quality of its products, the expertise of its staff and its ethical standpoint. It uses celebrities in its marketing.

Ongoing investment has resulted in Taylors' e-commerce platform increasing the proportion of sales through online channels, now accounting for 20% of its total business, up from 5% in 2019.

Taylors is considered a good fit with DGS given Taylors' high-end brand and higher-income customers. Whilst our products do face significant competition in Taylors' stores from other dog food brands, our premium products are appealing to segments within Taylors' own customer base, and we are seeing very encouraging growth in orders from Taylors as a result of its pet-owning customers.

Another benefit of our arrangement with Taylors is that through its investment in sophisticated inventory control systems, it is able to feed back to us very promptly on which products are generating interest from its own customers and to provide even more information about its online customers' profiles. This has proved very interesting – it is clear that Taylors has given us access to a very different kind of pet-owning customer. Taylors has also been able to provide more generalised advice to DGS on the type of products that customers of Taylors prefer or would like to see. Its orders admittedly come in at the last minute on occasion, but the increase in revenue has been worth it.

We feel that the combination of an up-market brand, an affluent and discerning customer base, a wide distribution network, an impressive e-commerce business and insight into pet owners' changing demands outweighs the more demanding discounts and the short notice on orders from Taylors.

The Veterinary Support Trust (VST): Given the ongoing client losses in our traditional channels to market, we were delighted when Hugh Logan arrived with VST. This is one of the largest family-owned veterinary groups in the UK, with branches across the UK and a head office in London. Branches are based in town centres and the group focuses on care of small animals. The four largest branches incorporate their own animal hospitals.

All branches sell a range of pet food, including vet-prescribed products, age-related products and pet food for other special dietary requirements. Historically, the group has stocked a large range of brands, but in recent years it has restricted the number of brands following some negative press regarding pet food manufacturers making unsubstantiated health claims.

The reputation of VST, combined with its ability to reach dedicated pet owners, will help support both revenue growth and our reputation as a health food choice for dogs.

Pets in Paradise (PiP): This is the other client that Hugh brought with him when he joined in 2018. PiP has grown into one of the largest chains of pet stores in the UK, with a substantial online presence.

PiP caters for dogs, cats and a variety of other small pets and offers a wide product range, including pet food, accessories and toys. Larger stores offer a range of services including dog grooming, vaccinations, health-checks and so on (three stores have an on-site vet practice). Staff are widely regarded as being specialists in animal health and nutrition.

Branches sell a range of sizes of all the major dog food brands, both wet and dry foods, as well frozen food and dog treats. Bestsellers include natural foods, weight control foods and grain-free foods, with variety packs of these types being particularly popular. Online there are 45 brands available, but these are selectively chosen for their health benefits.

Whilst we therefore face competition, we enjoy the positive publicity of having our products stocked and promoted by PiP, both in-store and online.

Overview

These three significant clients are important additions to our client list. Given the restructuring in our channels to market, the ability to win and service highly visible, successful and well-regarded large clients of this type is critical to our success. Taylors alone generated almost 20% of our business in 2020, and whilst VST and PiP do not have the scale of Taylors, they are still significant clients for us. Consequently, we must be mindful of any reported issues or production orders that come in from these clients and prioritise accordingly. Feedback from the production team is that there are an increasing number of short-notice orders – a marked change from the typical regular monthly order. This seems to be due to a shift in the type of food that pet owners are buying.

As retailers, none of our clients pay the full recommended retail price (RRP) price: individual discounts (and credit terms) are linked to the predicted size of orders over a year, and the level of exclusivity that they offer DGS. All of these three clients enjoy better discounts than the average that we normally offer: VST and PiP both receive discounts of 32%.

This obviously puts our margins under greater pressure, so manufacturing efficiency and productivity are more important than ever in ensuring that we continue to grow profitably.

Average discounts by channel

	2020	**2019**	**2018**
Vet practices	30%	28%	25%
Specialist pet stores	30%	27%	25%
Other	23%	23.6%	22.7%
Taylors	40%	40%	n/a
Overall weighted average discount	**31.2%**	**27.4%**	**24.4%**

Average discount is calculated as: (RRP value of sales - Actual sales revenue) ÷ RRP value of sales.

Example discount calculation 2018:	RRP value of sales	=	£19.3 million
	Actual sales revenue	=	£14.6 million

Overall **weighted** average discount = (19.3 - 14.6) / 19.3 = **24.4%**

Extract from Hugh Logan personnel file: quarterly performance review

Date: 13 July 2021 (Performance review conducted by Zoom call)
Reviewer: Louis Bailey
Team member: Hugh Logan
Area: Northern

Own commentary on performance in period (by Hugh Logan)

It's been an exciting time at DGS, and the growth in the business has been encouraging. However, I feel I need to recap my concerns raised in previous staff meetings and performance reviews:

The commission structure and the way in which clients are allocated is unfair, but you already know my thoughts on this. I must also reiterate my concerns about letting the least experienced member of the team manage our biggest and most critical client. I understand the desire in a family firm to manage progression, but the downside risks of this are significant.

More importantly, the lack of alignment between the way in which behaviour is rewarded for growth and the impact on the rest of the business is increasingly dysfunctional.

With the team being pressed to meet what I feel are increasingly irrelevant KPIs, the impact in terms of profitability is ignored – we are forced into chasing ever-smaller clients who are increasingly demanding.

It's not just the sales and business development team that are impacted by all of these things. Pressure is being created by having a very long list of poorly managed clients whom apparently we are not allowed to say no to or ever to disappoint. This pressure is being passed onto all of the operational teams: procurement, production, cleaning, quality assurance, packaging, warehousing and dispatch. Ultimately, a really serious mistake could happen, and the implications for DGS, our clients, their customers and their pets could be catastrophic. That raises ethical concerns in my mind.

As a salesperson, I obviously understand that sales growth is important, but not at any cost. My view is that we have a duty of care to employees, clients, their customers and their pets.

Commentary on Hugh Logan's performance in period (by Louis Bailey)

After a promising start with DGS, sales KPI performance is a bit mixed.

Hugh has a great skill at winning clients, but average revenue continues to be lower than is preferred, with a consequent impact on meeting the total revenue target for the Northern territory.

The difficult trading conditions in our wholesale markets are noted, and Hugh's comments will be taken on board and addressed as soon as we get through the current very busy period.

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DGS: Production processes (extract from production staff training manual)

Introduction

DGS's product range includes a range of wet and dry dog food products, as well as dog treats (which can be in either format). Each product variant, whether wet or dry, has a separate production run, requiring a separate set-up and close-down process. Wet and dry dog food products are made using different processes, and each has its own specialised processing and cooking equipment.

Dry pet foods are made by mixing dry and wet ingredients to create a dough which is cooked into biscuits known as 'kibble'. Wet pet foods are made by mixing recipe ingredients together with water and selected thickening agents to form a gravy or jelly as required. The mix is injected into a suitable container which is sealed prior to cooking.

Production run stage	Detail
Ingredient selection	This starts with the required ingredients being selected from raw materials storage and loaded into the correct equipment. It is critical that the correct ingredients are selected for each production run.
Mixing and pre-conditioning	Some formulations require a pre-mixing, grinding or pre-conditioning stage, which facilitates the main manufacturing process.
Cooking	Dry food cooking involves preparation of a dough mixture of ingredients, which is then passed through a combined heating and extrusion process. The dough is forced through a shaped die to produce a required profile, which is sliced into kibble. Wet food ingredients are combined into a liquid or semi-liquid mixture (depending on the product variant). This is then pumped into the required container type (can, tray or pouch). The container is hermetically sealed and the food is then cooked inside the container, which sterilises the wet food product.
Cooling, packing and storage	Output from the cooking process is cooled, boxed and then taken to storage. Dry food is temporarily stored and transported to the packaging area, where it can be packaged into a variety of different pack weights (eg, 2kg, 6kg, 12kg), depending on client orders. DGS's dry pet food and treats have a shelf-life of up to a year and its wet pet food has a shelf-life of 2 to 5 years.
Return to store	Any surplus ingredients that are not contaminated and are suitable for storage are returned to inventory.
Cleaning in place (CIP)	Once a production run is complete, the entire plant must be flushed out and decontaminated. All traces of ingredients and mix must be removed. This stage is critical to ensure no cross-contamination to a different product variant, as well as to remove any risk of infection from pathogens (eg, Salmonella) because of the risks associated with meat-based ingredients.
Quality assurance check and sign-off	All stages of a production run require quality-checking and sign-off. A critical check is overseeing the flushing-out process and then carrying out testing to ensure that all parts of the production plant are sterile.

In addition, given the potentially hazardous nature of manufacturing dog food, safety during the production process is an important aspect of the quality assurance protocols.

Product variants offered by DGS

DGS recipes are available with four different proteins: three types of meat (chicken, lamb and beef) and fish. Each of these is combined with selected ingredients to create a variety of formulations, which are designed for different dietary requirements including: age-groups (puppies and adults); health issues (eg, convalescence, weight gain/loss); sensitivity (eg, grain intolerance); performance; dog size (small dogs cannot eat large kibble); complete food versus treat/snack. These in turn can be packaged in a variety of formats and sizes. In total DGS has over 30 different product variants, each of which requires a separate production run.

Production planning

Production scheduling and planning are driven by client orders, which traditionally have not changed significantly month-by-month in terms of products required. This has made production scheduling easier to manage – most products have one production run a month. Anticipated customer orders and inventory levels are used to plan monthly production schedules.

DGS maintains inventory of raw materials, packaging and consumables. As storage space on site is limited, DGS generally holds only a limited inventory of finished goods.

For larger clients such as pet food retailers and garden centres that can hold inventory at their own stores, a replenishment delivery is dispatched once a month. For such clients, the sales and business development team agree an annual order quantity, and this forms the basis of the monthly replenishment. Individual clients can – and often do – amend monthly orders. Strictly, such changes require a month’s notice, but increasingly this is not being adhered to.

Some orders are fulfilled directly from inventory for smaller clients, particularly smaller vet practices with limited on-site storage. As orders arrive at DGS, the products are picked, packed and dispatched from stores within 24 hours of receipt.

The impact of limited on-site storage is that unexpected changes to orders can give rise to unscheduled production runs.

Cleaning in place (CIP)

As with most modern plants, the production equipment is designed to be cleaned without being dismantled, to facilitate quicker turnarounds. The CIP process requires the use of copious amounts of water and chemicals because of the need to flush out any remaining pet food mix and then to sterilise the plant. The flushing-out process is time-consuming and labour-intensive. In addition, it results in the loss of significant amounts of valuable product mix, and thus contributes to material wastage.

Material wastage

As well as the impact of CIP, wastage may also be caused by poor production scheduling, poor inventory control and spoilage. The material wastage KPI represents the volume of materials lost compared to the total volume of materials used in a period.

In the past, DGS was very efficient in its production scheduling, typically beating its production KPI target, which is set is at 7%. In the pet food industry this is considered excellent. A figure of 5% would be viewed as exceptional. The last two years, however, have seen materials wastage increase.

	2020	**2019**	**2018**
Material wastage KPI	9.7%	8.8%	6.3%

Plant maintenance

The production equipment requires ongoing maintenance, repair and upgrade. This work is typically scheduled in advance to pre-empt breakdown and avoid downtime. Where possible, it takes place overnight or at weekends outside normal shifts, to prevent interruption of production runs.

DGS: Quality assurance

Email

From: Ade John
To: Stephanie Bailey
Subject: DGS operations and quality assurance
Date: 15 December 2020

Background: I am having to highlight once again some of the production capacity constraints that continue to present themselves. As you know, I have been raising this for a while now – it has been an ongoing issue, particularly since we started selling to Taylors. It is obviously good news that we are growing and selling more products, but this growth is coming at the same time as changing client types, a new product launch and changing demand from pet owners.

The effect of these is unexpected changes in production scheduling, and that means an increased number of set-ups, which in turn means more downtime during each shift and thus longer shifts. These have been overcome by extended working, additional overtime and short-term temporary staff resourcing (which creates some control issues – see below).

Budgets: The above events are obviously impacting production department budgets. In terms of labour, we have only budgeted for the usual 2% annual pay rises over the last couple of years, but the reality is that in 2019 we had a 3.5% increase in production hours and in 2020 it was almost 5%. A bigger issue is production overheads – these are driven by a complex combination of volume, length and number of shifts, labour usage, production set-ups and the type of products. Some production runs are easier to set up and close down than others. I won't go into the details, but I will just say that the complexities have caused costs to rise, by £222k in 2019, and then by a further £284k in 2020 (ie, a total of £506k over 2018 levels). We can control these if we can control production, but at present we get the information on client orders very late, so efficient scheduling planning is difficult. Materials are also impacted, but I have a suggestion on that – see below.

Other problems: The problems are not just budgetary. The unexpected production scheduling has resulted in overworked and highly-stressed staff, bottlenecks in supply and longer running times, placing the plant and equipment under increased pressure. We normally operate on a pre-emptive maintenance basis, but with no time between production runs to carry out the normal routine maintenance, we are experiencing a higher incidence of breakdowns as a result. Whilst these are typically low-level, and on-site engineers and operatives are able to remedy the issues as they arise, we would prefer to be proactive, not reactive, to problems. Another, more worrying, implication of the heightened pressure to achieve production output has been some control failures, which have resulted in contaminated products. One specific incident was as follows.

Incident: On one occasion recently, staff shortages meant that a shift went through the close-down and flushing-out process without an experienced shift supervisor present. This meant that the team's work was not overseen in the way that our control procedures stipulate and the resulting failure to flush out production plant correctly following a poultry-based production run resulted in contamination of subsequent batches, which have tested positive for Salmonella.

Identification of the control failure: Standard quality control procedures involve sampling from batches before a product is moved to the dispatch area. This critical aspect of our quality assurance ensured that the contamination was identified before any products left the facility, and so this incident was classified as a 'near miss'. We therefore still have our unblemished record of never having had a product recall. The implications of a recall on our brand would be significant.

In a busy marketplace, our reputation for quality is one thing that we can point to as a differentiator. We need to rethink our approach to client management and how to manage our capacity more effectively so that we can return to production that is scheduled and carried out in a safe and efficient manner. One proposal to create some capacity as well as generate some savings is a product recovery system known as "pigging". Scott has produced a research paper on this (see **Exhibit 11**). His proposal, however, does not address the underlying problems; which in my view are the result of a sales and business development team issue – they need to manage their clients better.

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Research paper on productivity improvements at DGS (produced by Scott Destrier, head of production research)

15 December 2020

The issue

Pet food formulas are thick, difficult to pump and challenging to remove from the inside of pipelines. DGS has a CIP system but, because much of our equipment is either small-scale or larger second-hand re-purposed equipment, it lacks many of the innovations that modern technology has incorporated in automated CIP systems. As a consequence, changeovers typically involve a lot of water and chemicals, are time-consuming, labour-intensive and wasteful, as much usable product mix is often lost through the flushing-out process.

Proposal

This paper explores the introduction of a product recovery “pigging” system, which can improve efficiency in these applications. The “pig” in question is in fact a highly specialised piece of technology that moves through the pipework of the machinery, maintaining contact with the inside of the pipes whilst being able to travel round corners and in either direction.

Pigging systems increase yields, reduce changeover time and cross-contamination and improve batch control and traceability by creating clear barriers between batches.

The processes for many industries (cosmetics, paints, chocolate, household goods, food, drink and plastics, as well as pet food) involve pipe-based production methods. Consequently, pigging solutions (and other advanced complements to CIP systems) are supplied by a well-developed and highly competitive market. There are therefore a number of highly reputable, specialist contractors who would be able to install such a system. Pigging solutions are typically part of new installations but they can also be fitted to existing equipment.

Case study

Product Recovery & Cleaning Limited (PRC) is a market-leading CIP enhancement organisation which has installed this type of system in many food manufacturing organisations, including those producing pet food. It is well regarded in the field and comes highly recommended. PRC has provided us with the following case study (overleaf) to illustrate the benefits of such a system.

If PRC were to install such a system for DGS, it would be able to do so during downtime so that operations would not be impacted during the implementation period.

Case study: New pigging system at Company M

The problem

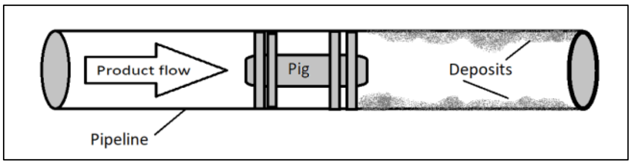
Company M is a medium-sized pet food manufacturing company based in the South of England. At its production facility, it produces a range of pet foods, primarily for dogs and cats.

Company M was experiencing significant waste during production changeovers. Pet food mix is an expensive raw ingredient, and significant quantities of valuable product were being wasted during changeovers.

The solution

After discussing Company M's objectives and requirements with company management, PRC designed and supplied a product recovery system which included a 'launch and receive' area. This works as follows.

The operator starts the pigging sequence by selecting the appropriate option on the system. This launches and returns the pig through a series of valves. The pig then flushes out valuable product remaining in the pipes, resulting in a high level of product recovery as well as cleaning the pipe for the next production run. Special technology ensures accurate and reliable pig location and subsequent control by the system.



PRC engineers ensured that Company M employees were fully trained on how to operate and maintain the equipment properly and safely. Installation was completed during production downtime.

The results

The primary aim of the project was to reduce product waste and thus increase yield, and this was achieved. The pigging system recovers up to 99.5% of product that is normally flushed away and lost.

Steff Jaune (CEO and owner of Company M) gave the following summary of the benefits obtained:

> "The production line holds around 350 litres of product. Depending on the product, this can be worth around £0.50 a litre and is flushed out once a day. Over a year, that adds up to 350 litres x 250 working days x £0.50 = £43,750 a year of recovered product that can be re-used. The reduction in material wastage was very material for us.
>
> "The other benefits we obtained were harder to quantify: increased capacity, improved working conditions, lower utility usage (water and power) and fewer expensive cleaning chemicals. We did not even bother evaluating the financial costs of those – we were just happy that our environmental responsibilities were easier to fulfil afterwards."

DGS: Suppliers and procurement summary (prepared by William Bailey, January 2021)

The quality of our pet food is of the highest importance, and that starts with the quality of our ingredients.

Every recipe is formulated by our highly-skilled pet nutritionists, who include experienced vets, ensuring that it is precisely balanced for specific dietary requirements (whether health, performance or other specific needs), as well as appealing to dogs in terms of taste, texture and – for dry food – size and shape. Our nutritionists' skills are complemented by those of our production engineers and technicians, who help manufacture pet food that looks appealing for our pet-owning customers.

Ingredients include:

- Meat (only from animals that are grass- or barn-raised; we do not use battery-farmed animals)
- Fish derivatives (from reputable and traced sources)
- Supplements (eg, vitamins, minerals)
- Carbohydrates (eg, rice, corn, as the recipe dictates)
- Other ingredients (eg, vegetables, fruit)
- Liquids (eg, water, oils)
- Other additives (eg, emulsifiers, colourants, preservatives, but no artificial additives are used)

As far as meat is concerned, we source from UK farms, and we also regularly discuss with our farmers our meat requirements and ensure that all necessary quality protocols are being adhered to. We use a range of different farmers to ensure that we do not encounter supply issues.

Our fish ingredients are all sourced from a specialist fish processor. The fish ingredients that we use need to be very high-quality, as fish is used for our "Sensitive" range – it is easily digestible, for dogs with sensitive digestive issues.

We similarly source vegetables, rice etc from reputable, traced sources.

Ingredients such as oils and additives are typically sourced from one of the large, specialised pet food ingredient manufacturers. These are wholesale organisations that enjoy economies of scale in procurement and distribution, allowing them to process and supply pet food ingredients – many of which are homogenous products – at affordable prices.

The manufacture of dog food is heavily regulated and DGS is particularly diligent with regard to its responsibilities. Stephanie Bailey has always been insistent on personally being able to guarantee the integrity of the ingredients for DGS health-based products, as well as the quality of the manufacturing processes.

Quality assurance is required throughout the entire supply chain – starting with the creation of a recipe to ensure that it is a complete and balanced diet, then progressively over the audit and inspection of ingredient suppliers, facility sanitation and security, storage of both ingredients and any manufactured product, including during and after processing.

Supplier contracts are reviewed every three years and an evaluation is made as to whether an individual supplier contract needs to be put out to tender. Prices charged by suppliers are less of a concern than quality issues for supplier choice, and DGS has always been prepared to pay more if the quality is at the required level. The procurement team is nevertheless conscious of average sector price increases of ingredients and uses these as a benchmark for assessing the price-to-quality trade-off.

	Year ended 30 September		
	2020	**2019**	**2018**
Sector average annual price increases of ingredients	1.5%	1.0%	1.0%

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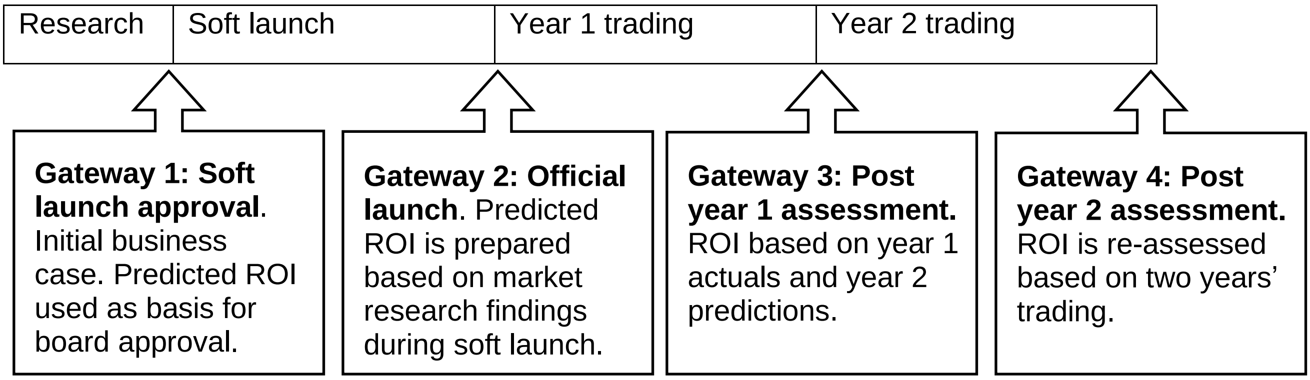
DGS: Nu-Dog-Fit product range launch report (Produced by finance team, September 2020)

Product launch evaluation process

The board of DGS assess new products using a target ROI of 25% based on gross profit averaged over a two-year period. Re-assessment is carried out at different gateway points over the lifecycle of a product launch, incorporating actual data to replace predictions as the data becomes available. The process is illustrated in the diagram below.



Product and market synopsis

Nu-Dog-Fit evolved from a recipe that was initially formulated for highly active dogs. Initial research indicated that a narrow niche existed for active show dogs, working dogs and racing dogs that would support a high price point.

Marketing insights identified a growing trend from a potentially significant segment of younger pet owners wishing to project their own healthy lifestyle onto their pets, which suggested that the planned recipe could be marketed more widely as a sports-related performance dog food. The target customer is more likely to shop online than DGS's more typical customer.

The Nu-Dog-Fit formulation is high in protein for muscle building and high in fat for energy and endurance, with additional nutrients, minerals and vitamins that promote strong bones and a robust immune system.

Product variants are limited to minimise the number of set-ups and complexity of the products that we market to pet owners. Nu-Dog-Fit is available as a grain-free wet food in only four variants: either chicken or fish, each with two vegetable versions. A kibble range will be considered in due course as informed by client demand.

Timeline	Product launch process activity for Nu-Dog-Fit
Sept 2018	Pre-launch activities: ○ Initial research gathering (see below) ○ Pilot testing of alternative recipes and marketing strategies ○ Low-key focus groups and data gathering at selected sports events, dog shows and client meetings.
March 2019	**Gateway 1:** "Soft launch" through selected channels ○ Trial final iterations of product and messaging ○ Obtain real feedback from buying customers ○ Test variety of price points

Summary of pre-launch activities: The initial pilot testing and research during 2018 and soft launch in 2019 were highly informative and helped shape the final product launched in October 2019. Unexpected revenue from sales of prototypes as part of price point testing during soft launch amounted to £37k.

Nu-Dog-Fit development and marketing costs: commentary on variances

	Budget £000	**Actual £000**	**Variance £000**
Formulation of recipe	10	4	6
Prototyping/focus groups	28	9	19
Marketing campaign and creative	27	26	1
Promotional events	86	*104	(18)
	151	**143**	8

* Actual promotional event costs are net of the unexpected £37k revenue generated during the soft launch in 2019, giving a total outlay on promotional events of £141k.

Investment costs of £143k are made up of all development and marketing costs incurred up to official launch. Any unplanned revenue obtained during soft launch is netted off against investment costs for the purpose of gateway evaluation. (All pre-launch costs and revenue are treated correctly for financial reporting purposes. They are combined here for the purpose of evaluation of new products only.)

The initial budget estimates assumed a lack of familiarity with the new high-performance formulation, including potentially having to work with focus groups to create different production prototypes. As it transpired, the formulation was very similar to some of the existing DGS recipes, and consequently a saving in some budgeted areas was achieved.

The area that required unexpected overspend was promotional events. The dog-owning customer type that reacted well to Nu-Dog-Fit was markedly different from the typical DGS customer, resulting in unbudgeted activities such as attendance at sporting events. With hindsight, this cost area might have been better anticipated: previous dog food new product launches showed a small variance only when the new products were similar to existing products and thus attractive to DGS traditional customers.

A review of launches of new products in the last three years showed that, when a new product was demonstrably different from the existing portfolio, the promotional events costs tended to be high. In the case of Nu-Dog-Fit, allocating the £37k of revenue during soft launch against the spend in these areas has mitigated the effect of the overspend variance.

October 2019	**Gateway 2:** Official product launch, through all key channels o Premium RRP (recommended retail price) planned for first year of trading (£6.00/kg), combined with introductory discount offers for pet owners o Initial higher discount offering to channels for promoting the new product o Recruitment of well-known dog-loving sports celebrity to endorse the sports/health benefits of Nu-Dog-Fit for both owners and their pets o Marketing to reinforce the DGS philosophy, embodied in the strapline “If pets were people”.
Sept 2020	**Gateway 3:** End of first year of trading. Premium positioning will be reinforced with an advertised 3% planned increase in RRP, from £6.00/kg to £6.18/kg.
Sept 2021	**Gateway 4:** End of second year of trading. Products tend to enjoy a five-year lifecycle before rivals start creating a closely competing offering, so this final review will be a last check before we continue for – typically – the next three years. Expectations following a Gateway 4 decision to continue are that revenues and profits will continue to grow. This is based on previous product launches that have been continued after two years of strong trading.

Nu-Dog-Fit has reached the end of its first full year of trading and this report sets out the **Gateway 3** evaluation regarding the decision to proceed.

Summary of initial research: The Nu-Dog-Fit launch was in response to feedback obtained from market research. Much of this feedback is incorporated in the marketing for Nu-Dog-Fit:

- Our core product differentiator – natural ingredients and no artificial additives – has been copied by our rivals, with similar claims now made for almost two-thirds of all dog food product launches.
- A UK-wide survey indicated that healthiness of dogs was a key driver in choice of dog food.
- The large number of dog food launches based on health has meant that this is now a common expectation and that brands need to go further to stand out.
- Research shows that almost 70% of dog owners look for heart health benefits for their pets, whereas fewer than 10% of new pet food launches promote such benefits as heart and cardiovascular system claims.
- The research also showed that exercising with a pet dog increases motivation, as owners are more likely to keep to their own exercise regime.

Sources: Market research, focus groups with selected pet owners, research into past DGS dog food product launches. Research carried out by DGS product research and development team and sales and business development team.

Gateway 3: Evaluation of Nu-Dog-Fit

Years ending 30 Sept	**Predicted 2020**	*** Flexed 2020**	**Actual 2020**	**Variance****		**Predicted 2021**
Volume: tonnes	50	60	60			137
	£000	**£000**	**£000**	**£000**	**%**	**£000**
Revenue	203	244	250	6	2.5%	570
Materials	(127)	(152)	(155)	(3)	(2.0%)	(265)
Labour	(20)	(24)	(23)	1	4.2%	(48)
Production	(53)	(64)	(62)	2	3.1%	(131)
Cost of goods sold	(200)	(240)	(240)	-	0.0%	(444)
Gross profit	**3**	**4**	**10**	**6**		**126**
Gross profit %	1.5%	** 1.6%	4.0%			22.1%

* 'Flexed' represents the predicted figures, restated to reflect actual volumes sold
** Ignoring rounding

Production cost predictions: Owing to the common manufacturing process for all DGS products, the ability to assess operational costs is very accurate and this has been demonstrated with Nu-Dog-Fit.

Materials: The Nu-Dog-Fit recipe is based on ingredients already sourced by DGS. Therefore, whilst the particular high protein and fat mix of these is original to the Nu-Dog-Fit range, we were able to use our normal suppliers. Wastage rates were in line with expectations – the key driver of wastage is flushing-out, a function of the number of production set-ups. For Nu-Dog-Fit – with only four variants and production budgeted at best case levels – these were predicted accurately.

Labour and production: These are driven by number of production runs, production run duration, and output capacity (kg/hour). The output capacity of the food production equipment plant used by DGS is highly predictable and costs for production runs of a known volume can generally be predicted within a 2.5% tolerance. For new products, monthly scheduling of production assumed that best-case demand levels would be achieved. Any periodic demand shortfalls were held in inventory.

Revenue predictions: Key uncertainty over new product launch surrounds demand at the planned price point. Predicted revenues reflected most likely demand levels; however, the results achieved in 2020 in terms of both volume and price point were at best-case levels, strongly ahead of predictions.

Nu-Dog-Fit Gateway 3 evaluation: re-assessed ROI after one year's trading

Expected average gross profit	= (126 + 10)/2	=	£68k
Actual costs incurred up to official launch		=	£143k
Expected ROI at Gateway 3		=	47.6%

Nu-Dog-Fit indicates a high likelihood of generating a ROI in excess of 25% and the decision is to proceed at this point.

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EMAIL

From: Charlie Bailey
Date: 15 June 2021
To: DGS board and senior managers
Subject: Update on DGS online presence and digital marketing

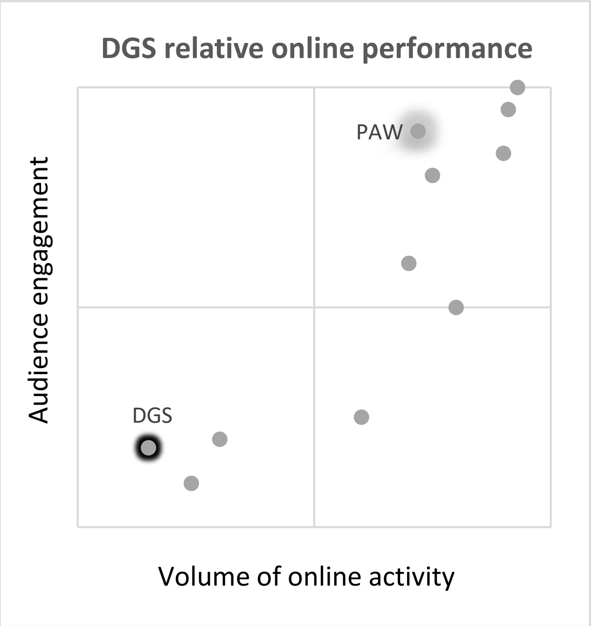
Introduction: We are planning to make some enhancements to the DGS website, and it is hoped these will go live after our September 2021 year end. These enhancements include building a shopping cart facility to allow DGS to sell Direct-To-Customer (DTC), ie, to pet owners, rather than go through our normal channels – namely, vets, pet stores and Taylors.

Background: The success of the recent launch of Nu-Dog-Fit was due to its appeal to younger pet owners who exercise with their pets or have engaged with the sporting connotations of Nu-Dog-Fit for their pets. This has coincided opportunistically with a large increase in new pet owners, many of whom are young, and thus are more likely to shop online as well as exercise regularly. These pet owners are quite different from the typically older purchaser of DGS dog food and it is apparent that the well-developed e-commerce infrastructure of clients such as Taylors has given us access to the new audience. This access is, however, impacting our financial performance: owing to the competitive pressures in our normal channels, we are increasingly having to offer extended credit terms and larger discounts on RRP to our clients. For example, Taylors receives 40% discount on RRP and 90 days' credit.

Objective: The purpose of upgrading our website is to generate revenue at a higher margin via DTC sales. This would enable us to sell directly to pet owners at significantly reduced discounts, at prices which they would find attractive. We have no contractual restrictions with any of our clients preventing us from doing this, but we would need to be cautious that we do not jeopardise our relationship with our clients (eg, we do not want to be seen to be competing directly with them on price). Our offering would therefore be linked to the support that we can offer newer pet owners, in the form of access to blogs, e-newsletters and other promotional material. The intention is that by engaging with pet owners (eg, by creating an online society of pet owners), we can persuade customers to form an ongoing relationship with DGS, potentially to sign up to a subscription service, and thus a direct comparison on price point with our key clients is less apparent.

Online presence: In order for our e-commerce to become a viable source of revenue, we need to develop our online presence so that it generates traffic (ie, visitors to the website) and is then suitably engaging so that visitors stay on the site and buy our products.

Currently, we have little online activity (eg, we rarely post on social media) and the result is that our website receives few visitors. A comparative ranking of DGS's volume of online activity against a selection of our close rivals, including Pet Alliance Wholesalers (PAW), illustrates that our volume of online activity is relatively low and our online activity gets very little engagement with our target audience (eg, they don't interact with it, they don't share it or comment on it).



Proposal: I spent a year with a digital marketing agency, Pro-Online Marketing Limited (POM). It was clear that in its field it was proving to be disruptive and winning clients as a result. POM has a high profile and a very public team of young managers and directors. The average age of new employee recruits to the social media team is 18. POM's philosophy is that the experts in social media are the people that use it.

Whilst I was there, I had the opportunity to work on a client (X Ltd) that was in a similar situation to where we are now. X Ltd is in a related sector to DGS and the underlying issues are identical. I have collated the actual data to show how a digital agency such as POM could benefit DGS (see **Exhibit 15**). I have disguised the name, but everything else is as it occurred. Please keep this confidential.

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DGS: Online presence – illustration of impact of a digital marketing agency

CONFIDENTIAL: Based on Pro-Online Marketing Limited (POM). Prepared by: Charlie Bailey

The agency POM was commissioned by X Ltd to improve its e-commerce operations. Overall objectives were to increase the number of website visitors, improve the buying experience so that visitors stayed longer, increase the number who clicked all the way through to completing a purchase (known as click-through-rate (CTR)), increase the amount that visitors purchased on each visit (average order value) and, more generally, improve X Ltd brand advocacy.

The work involved the building and ongoing development of the X Ltd website and e-commerce platform, together with subsequent management of its digital marketing operations. This primarily involved Search Engine Optimisation (SEO), whereby POM generated increased "organic" traffic to the X Ltd website. (Traffic as the result of a website search – eg, via Google – is known as organic traffic.) POM combined the SEO with an enhanced online presence, primarily through setting up and managing a social media (SM) campaign.

POM also generated traffic by arranging paid advertisements (paid ads) and by setting up and managing affiliates (other organisations that promoted X Ltd's products). POM made any required payments relating to paid ads and affiliates and then recharged X Ltd for these costs, in addition to its monthly retainer (see below).

The involvement of POM had a significant impact on X Ltd's website performance, as follows:

Performance metrics	**Monthly impact of POM**
Awareness: organic traffic to website	10,500 visitors due to POM's SEO
Awareness: paid ads driving traffic to website	1,200 visitors arrive after clicking a paid ad
Awareness: traffic to website driven by affiliates	3,600 visitors arrive via an affiliate link
Interaction: bounce rate	40% of visitors leave immediately
Conversion: item in shopping cart	17% of visitors place item in shopping cart
Conversion: average CTR	6.5% of all visitors make a purchase
Conversion: average order value	£58
Advocacy: brand mentions per month	500 mentions on SM

Costs of POM agency

- Monthly retainer: £2,500
- Paid ads: costs are driven by number of times that ads are clicked on, averaging £5 per click
- Affiliate costs: 3% of attributable revenue
- Initial investment: £140,000 for development of e-commerce platform and marketing strategy

Profit impact of POM per month

	Visitors	**CTR@6.5%**	**Value@£58**	**Costs**
			£	**£**
Organic search traffic via Google due to improved SEO/SM	10,500	682.5	39,585	(2,500)
Traffic attributed to paid ads	1,200	78.0	4,524	(6,000)
Traffic attributed to affiliate referrals	3,600	234.0	13,572	(407)
Total increased visitors	15,300	994.5	£57,681	£(8,907)

		£
Increase in gross profit *	25% x £57,681	14,420
Increase in delivery costs *	6% x £57,681	(3,461)
Agency costs		(8,907)
Monthly impact on profit		**£2,052**
Full-year impact on profit (12 x £2,052)		**£24,624**

* X Ltd has a gross margin of 25% and delivery costs are estimated at 6% of revenue.

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Digital Magazine Marketing Blog – FAQs: How to improve your website

Where does traffic come from?
The sources of traffic to an organisation's website vary greatly by sector. In overview, they are:

- website search (eg, via Google): around half of all traffic to a website is from website searches
- direct (eg, pre-saved link): creates around a quarter of the traffic to a website
- referral links from other sites (eg, blog): around 10% of traffic is referrals
- social media (eg, Facebook, Instagram, TikTok): this is responsible for around 10% of traffic.

How do I get my website to appear in a Google search?
1. Paid ads. These can be an effective way of getting a link to your website to appear high up on a search result, but they involve costs and internet users may not click on the link.

2. Search Engine Optimisation (SEO). This means enhancing aspects of your website so that it appears on the top of a results page after a search. SEO is typically an ongoing exercise and requires an improvement in the following aspects of a website:
    - Links from other websites to your website
    - Brand strength
    - Attractive/helpful content
    - Keywords used on the website
    - Traffic to your website

Achieving some of these improvements can require technical skills that a business may not possess in-house (eg, information architecture, technical design and build of the website). Some, however, are generally within the capabilities of the people running the business, as fundamentally what SEO aims to do is make a website more attractive to humans (as opposed to a computer algorithm). Creating a better service or product will improve a website's ranking following a search, as will obtaining positive endorsements from influencers/affiliates (see below) who are viewed as "high-quality".

How do I get traffic from social media (SM)?
By being active and posting content online. This can involve the use of influencers: paying an individual who, by virtue of his/her celebrity status or reputation in a particular field, is well regarded and will help drive more traffic to your site. It can also include paid ads (eg, Facebook ads) that target the customer segment stipulated.

Are there any other sources of traffic?
Affiliates: In simple terms, you agree with another organisation to promote one another's products.

It is also possible to pay organisations to drive traffic to your site, although these can sometimes be artificial visitors (also known as "bots"). Whilst this can potentially help search engine rankings, artificial visitors have a number of downsides – not least because they do not actually buy anything. Human visitors are obviously very much preferred!

Any there any problems with these traffic drivers?
Use of influencers and affiliates is not without its problems. You are reliant on them not saying or doing anything online that might harm your brand, so they need to be chosen with care.

How do I know if it is worth the cost?
Attributable revenue: You need to be able to attribute revenue to specific marketing costs. This will help you understand which marketing spend is proving most effective in generating actual sales. There are lots of channels (eg, SEO, paid ads, social media, affiliates), and each of these has different touch points with potential customers. The effectiveness of each channel and each touch point within them varies, so tracking revenue and linking it to costs incurred will help make the most of a limited budget.

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EXHIBIT 17A

Recent media coverage

Traffic generation (Hotspot bloggers: August 2021)

Traffic: Website traffic is critical and any business wants more of it – as long as it's the right kind of traffic. In principle, the greater the amount of traffic visiting a website, the greater its earning potential. Unfortunately, not all traffic leads to sales – because some of it isn't human!

Fake traffic – what's the point? Fake traffic is traffic generated by software. Why would anyone do this? Because marketing agencies get paid based on the amount of traffic that a website receives, or the number of times that an ad for a website is viewed.

This can encourage unscrupulous agencies to inflate their ad revenue by making a site's audience appear greater than it is in reality by creating artificial visitors.

What do fake visitors look like? It's not that simple: some programs are very sophisticated, but there are a few metrics that indicate where things are not as they should be. Or more simply put, if something looks too good to be true, it's probably because it is…so anything unusual is suspect in this context.

The following analytics are a good place to start:

- **Bounce rate**: This is defined as the percentage of single-page sessions (someone lands on your website and then leaves) with no interaction with the page. If this number is extremely high – or, conversely, extremely low – it is potentially due to fake traffic.
- **New sessions**: A sudden increase is new users is unusual, as is a big increase in repeat visits with no new users. This could indicate the same programmed visitors (bots) coming back again and again.
- **Geographical location of visitors**: A big increase in visitors from a different country, especially one with a language different from that of the website's content, would be unusual.

EXHIBIT 17B

Aggressive pets? or just badly-behaved pet food manufacturers…
(Watch Dog Website: August 2021)

To the casual observer, the players in the pet food industry might appear to mimic the well-disciplined pets of many of their customers. A deeper exploration, however, reveals a rather more primitive dog-fight emerging, as the participants appear to have started snapping and snarling at each other…

Disputes within the multi-billion-pound industry are increasingly apparent, as larger, established marketeers contest claims made by the upstarts. At least one newcomer is fighting back.

Pet Alliance Wholesalers (PAW), like a fierce terrier, has been aggressively taking on the bigger dogs in the neighbourhood.

PAW has been disputing its rivals' claims regarding their natural ingredients and the promoted health benefits of their products. PAW maintains that these are unsubstantiated and misleading.

When asked for a comment, John Steptoe, CEO of PAW, stated: "It's dog-eat-dog in this sector, and I'm not backing down from anyone – whatever it takes!"

EXHIBIT 17C

Extract from cat lovers' online blog (January 2021): Why do we care about cats?

Cat lovers may be cleverer and more caring: Research shows that whilst cat lovers are introverted, they are also more open-minded and sensitive than dog lovers. Cat lovers also scored more highly in intelligence than dog lovers.

Cat cuddling is good for you: To reduce anxiety levels, giving your cat a cuddle is scientifically beneficial – it releases oxytocin, the bonding hormone or "cuddle chemical", which can make you feel less stressed.

Cats are good for your heart: Further research shows a link between cat ownership and a reduced risk of heart attack or stroke. The sound of a cat's purr can calm nerves and reduce blood pressure.

Cat companionship: In an ever-disconnected world, cats provide a connection with another living creature, and that brings companionship and reduced feelings of loneliness.

Allergic to cats? According to a scientific study, infants exposed to cats were less likely to develop allergies in later life.

Cheaper? It's a keeper! One practical point is that as cats are smaller, they don't eat as much, so you get the same companionship benefits, at a fraction of the price! Cats cost much less to keep than dogs.

All of these perhaps explain why cat ownership is on the rise, with very different types of people becoming cat lovers these days. We have even seen some high-profile celebrities posting pictures of their new cat companions on social media.

EXHIBIT 17D

Pet dietary differences (Pet Manufacturers monthly blog, July 2021)

According to recent research, approximately half of cat owners feel that pet food manufacturers treat cats as second-class citizens; cats are poorly served.

The reasons are linked to dogs being larger and eating more – so basically a bigger market. But that's maybe about to change: cat food market growth follows cat population growth, and that is rising. The number of cat food brands has consequently increased by almost 20% in the last two years.

While wet pet food overall has been gaining in popularity and sales, the segment seems to provide a particularly strong opportunity for innovation in respect of cats. They often prefer wet food and, because it's high in water, the format offers a way to ensure that cats are well hydrated; and for cats that are obese – an increasingly common problem – wet food makes them feel full, so it helps control their weight.

A common downside of wet food (for any species) has been that many owners find metal cans inconvenient and messy to open and store in the fridge. Innovation in the category is addressing that issue too, as more brands offer wet cat food in convenient plastic trays, often in single-serving sizes, or in resealable tubs that can be warmed to room temperature, which many cats prefer.

The other issue is that cats are carnivores – unlike dogs, they need to eat meat, so they cannot just get dog food in a different wrapper!

EXHIBIT 17E

Extract from Pet Food Today web posting (July 2021): How expensive is a pet?

Are pet owners contributing to an ecological problem? Domestic pets' eating habits combined with those of humans are responsible for huge volumes of greenhouse gases being released into the atmosphere every year. That's due to all the livestock raised that goes into pet and human food. Raising livestock for meat takes up land, water and energy, which pumps lots of heat-trapping greenhouse gases into the environment. With pet ownership increasing in many parts of the world, the effect will get worse. So, is this the fault of farmers? pet manufacturers? pet owners? Who is to blame?

EXHIBIT 17F

Posting on social media ("Tweet") relating to pet food sector (September 2021)

"It's about time that pet food manufacturers started taking the environment seriously. The problems caused by intensive farming, the waste of water and power in manufacturing pet food, the emissions from the factories and the wasteful packaging all add up to a huge environmental problem. Pet food manufacturers need to be clearer on their ethical responsibilities and take action!"

EXHIBIT 17G

Extract from Online Business Magazine (July 2021)

Business sense or nepotism?

nepotism (noun) The preferential treatment of relatives or friends, especially by giving them jobs, by those with power or influence.

A dictionary definition of 'nepotism' apparently makes things clear, but life, inevitably, is more complex…

Preferring one's relatives for jobs over non-relatives may be a controversial topic in business ethics, but it is not necessarily unethical to do so.

Whilst it is the custom to recruit and promote the most qualified candidate for a role, a number of factors play into the issue: the circumstances of the business; what are considered acceptable policies; and the consistency by which such policies are implemented. It is not uncommon for smaller organisations to hire internally rather than externally, and to encourage referrals from family and friends – there can be highly beneficial effects of this type of policy, as long as it is applied consistently and fairly.

Family businesses can benefit from multiple generations of family involvement. However, the recruiting of underqualified family members can create a business issue if it undermines the company culture and passes an increased burden onto other staff.