Article

Analysing the marketing strategies that fish farming businesses in the UK can use to gain a competitive advantage

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ANALYSING THE MARKETING STRATEGIES THAT FISH FARMING BUSINESSES IN THE UNITED KINGDOM (UK) CAN UTILISE TO GAIN A COMPETITIVE ADVANTAGE

Structured Abstract

Purpose

This case study explores marketing strategies that UK fish farming businesses can employ to gain a competitive advantage. The marketing strategies examined include product branding and core competencies, sales promotion, market positioning and segmentation.

Methodology

A survey through an online questionnaire was mailed to 5 randomly selected trade associations of UK fish farming businesses and distributed to their registered members, of which 200 responded. Both male and female genders with different age groups and levels of experience in the UK fish farming business participated. In addition, ten articles were sampled for a systematic review.

Findings

Results show that UK fish farming businesses could increase sales by using eco-labels in product branding to attract premium prices, build consumer confidence, and using high-quality packages for fish products will keep fish fresh for a longer period.

Originality

A significant recommendation from this case study is that fish farming businesses need to be creative and innovative in ways such as leveraging branding, sales promotions, and core competencies to win the trust and confidence of consumers. Most importantly, each fish farming business should know the specific marketing strategy that works for them; this case study shows that not all branding and sales promotion techniques enhance competitiveness. The scope of the research is limited to the UK. The findings cannot be generalised and used for other jurisdictions because of variable economic and market conditions.

Keywords

Marketing strategies, Competitive advantage, Product Branding, Core Competencies, Sales Promotion, Market Positioning, Market Segmentation, Fish Farming, Strategies.

Introduction

This case study evaluates the extent to which fish farming businesses in the UK can utilise effective marketing strategies to expand their market share to gain a competitive advantage. Based on recent statistical evidence, the UK fish sector has both small and large-scale fish farming businesses. Some of the large-scale fish farming businesses include specific dominant brands such as the Private Label brand (60.4%), Bird's Eye (27.4%), Young's (27.3%), and John West (24.2%) (Statista, 2021). A summary of the leading fish and seafood brands in the UK is shown in Figure 1.

Fig 1 here

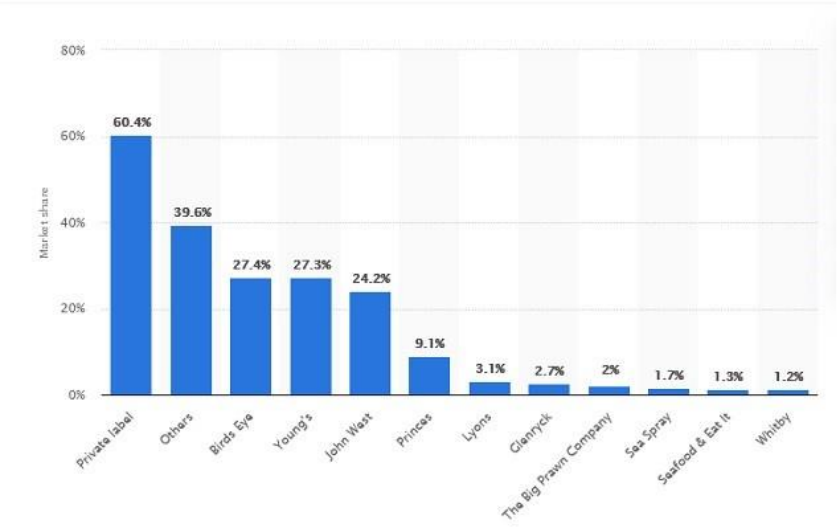

Figure 1: Leading Fish and Seafood Brands in the UK Ranked Based on Market Share (Statista, 2021).

UK food consumption has increased due to the Covid-19 effect (Holland, 2020). As a result, the country has recorded an increase in fish revenue by 4.6%. In that respect, there is a rise in opportunity for fish farmers to increase their market share by enacting strategies to exploit high demand. This case study explores the marketing strategies that the UK fish farming businesses can utilise to gain a competitive advantage.

Literature Review

Trends in Fish Farming in the UK

Although UK fish farming has expanded over the past decade, it has not kept pace with the global growth rate (Black & Hughes, 2017). In the UK, Scotland posts the most significant aquaculture production of 174,531 tons, followed by England (15,624 tons), Wales (9,452 tons), and Northern Ireland (5,528 tons) (Black & Hughes, 2017). This implies that Scotland has a strong culture of fish farming and fishing infrastructure. The result is also consistent with Ellis *et al*. (2016), who note that farming of salmon in Scotland has improved in terms of commercialisation, production efficiency, and in the welfare of the farmers. Essentially, there was an increase in the number of farms and a decline in dependence on imports. Meanwhile, Chu *et al*. (2020) add hat fish farmers have adopted cage designs for offshore fish rearing. The offshore sites provided good water quality for enhanced fish growth.

According to the Marine Stewardship Council (MSC 2021) fish in the UK market is sold as frozen, chilled, tinned, food-to-go, fish counter and foodservice. Some are packaged and labelled while some are not. MSC also highlighted that labelling of fish and seafood in the UK and Ireland has increased by 53% in the last five years. The Covid-19 pandemic affected sales growth, but in the past year sales of MSC labelled frozen fish product have grown by 24%, while sales of chilled, food-to-go, fish counter and foodservice products all decreased.

Kay, (2021) supports this view highlighting that in March 2020, during the first lock down in the UK, the demand for frozen and tinned fish sales increased while the demand for chilled products decreased as consumers looked for items that would keep longer. Retail sales significantly increased and boosted total seafood weekly volume sales by 56%.

Mintel (2022) stated that despite the COVID-19 outbreak, the increase in remote working has boosted the fish market considerably since 2020. Although the report highlights that sustainability is posing a

threat to the market due to customers requesting vegan or plant-based alternatives from established brands. This implies that fish is seen as a healthy choice and there is an increasing demand for it, but a major challenge could be an increased customer demand for vegan alternatives.

To improve growth, Besson *et al*. (2016) note the use of genetic improvement in terms of feed conversion rate. As production volume increases, Føre *et al*. (2018) show that increased monitoring and controlling challenges emerge. These findings suggest that increased fish production in the UK was due to a combination of different factors, such as using innovative and sustainable fish farming practices. Kobayashi *et al.* (2015) predict a rise in global fish supply from 154 million tons to 186 million tons between 2011 and 2030. Hoga *et al.* (2018) note that this increase is stimulated partly by advanced hormones in fish farming.

Trends in fish farming in the UK also involve the use of pesticides and medication to enhance production. Banerjee and Ray (2017) noted an increase in the use of probiotics to counter various types of fish diseases. Similarly, Simon-Delso *et al.* (2015) indicated that some of the insecticides used in fishing practices to control pets in fish farms included fipronil and neonicotinoids. This implies a rise in the scientific management of fish farming and suggests that UK fish production may expand in the future as risk factors to insufficient production can be mitigated. However, Maurya *et al.* (2019) warned that excessive use of pesticides in water bodies could cause aquatic toxicity compared to herbicides or fungicides.

Contrary to Banerjee and Ray (2017), Luis *et al.* (2019) noted that disease control in fish farming involved the application of nanotechnology, ensuring that the aquatic environment was preserved in the process. Meanwhile, Dadar *et al*. (2017) stated that vaccines were used in the control of fish pathogens. Therefore, apart from treatment, preventive measures against infectious diseases were available through advancements in the vaccinology of the fish.

From the above literature, a key point noted is that innovative fish farming methods combined with advanced disease control practices are expected to increase fish production in the UK. However, to gain a higher market share, UK fish farming businesses can use eco-friendly fishing techniques to provide quality and affordable fish products.

Fish Farming Challenges in the UK

Alam *et al.* (2022) note that one of the major recent challenges for fish farming in the UK is the COVID-19 pandemic. The authors state that the pandemic has affected fish supply chain factors such as a lack of technical assistance, an inability to sell the product, a lack of transportation for the fish supply, export restrictions on fish and fisheries products, and a low fish price. Alam *et al.* (2022) noted low motivation for fish farmers, inadequate production, unanticipated stock retention, a loss in returns and food insecurity for many small-scale fish farmers. This shows that COVID-19 has contributed to the challenges faced in fish farming in the UK, disrupting the fish food chain, reduced livelihoods, and economic vulnerability.

Brexit has posed some challenges to fish farming in the UK and Stewart *et al.*, (2022) highlighted two things related to this study. Firstly, although UK is no longer part of the EU, the extent of its regulatory autonomy to implement its own international agreements and approaches to management as a coastal state is limited (Stewart *et al.*, 2022). The authors state that the structure of the fisheries deal in the Trade and Cooperation Agreement (TCA) as well as the contingent link between fisheries and trade causes limitations in terms of the extent to which the UK can unilaterally adjust key aspects of fisheries policy on quota and access. Secondly, EU vessels continue to enjoy extensive levels of access to UK waters, including within the territorial zone despite promises made to reduce levels of access to UK waters.

Euromonitor (2021), as cited by Business Gateway (2022), note that the post pandemic and post Brexit environment could pose challenges to the British fishing industry in the areas of labour shortages, increased prices, and product shortfalls. Euromonitor (2021) also highlighted that these combined

challenges could accelerate the need for training programmes aimed at developing skilled staff and encouraging long-term careers in the British fishing industry. This implies establishing training programmes to develop skilled employees is one major way to mitigate some of the challenges posed by Brexit and the pandemic.

Tonini *et al.* (2018) noted that there were instances of uncertainty in the composition and the amount of fish produce leading to wastage. Jennings *et al.* (2016) supported the view and added that the number of fish produced was more than demand, creating overall seafood wastage. This suggests that fish cooperatives should be strengthened to support UK fish businesses to export surplus and avoid losses. In this regard, UK fish businesses can gain the competitive advantage of accessing a broad market base due to collaboration.

Loureiro *et al.* (2015) highlighted that disease and pest infections deterred seaweed cultivation. In open sea cage farms, AlZubi *et al.* (2016) showed that feeding the fish was associated with uneven growth distribution, cost inefficiency, environmental impacts, and food wastage. As a solution, a smart feeding system was proposed in which fish were fed based on behavioural characteristics. Goddek *et al.* (2015) explained the smart system as consisting of hydroponic plant culture and fish culture, which ensures a sustainable fish production system. This implies that UK fish farming businesses that embrace smart feeding system can gain a competitive advantage since it can enable them to create fish farms near markets and utilise a sustainable system that reduces overall production costs.

Brooker *et al.* (2018) stated that some challenges include long-term funding and insufficient background knowledge concerning cleaner and sustainable fish production. Essentially, there is a need for more improvement concerning sustainable fish farming in the UK.

Besides high costs, Helland *et al.* (2015) reported the presence of ecological challenges to fish farming, including temperature, water pressure, and salinity which contributed to various infections. Using

sustainable fishing models to ensure consistently high production levels and developing a reliable supply chain is one strategy that UK fish farmers can use to gain a competitive advantage. Moreover, fish farming businesses could train their staff on effective production methods, including discharge of effluents, breeding strategies, and good conditions for optimal fish growth. Implementing the strategies can ensure the businesses gain a competitive advantage in terms of minimising losses and efficiency.

Product Branding Marketing and Core Competencies in Fish Farming Sector

Product branding in the fishing sector is used to convince consumers of the safety and quality of the fish and the sustainability of the associated farming process. Le Manach *et al.* (2020) noted that brands incorporated Marine Stewardship Council (MSC) labels on the fish products to express compliance with regulations.

Bronnmann and Asche (2016) asserted that branded fish products enjoyed premium prices and private branding and labelling is important for promoting the value of various fish products. Sogn-Grundvåg *et al.* (2019) showed that whitefish in UK grocery retail had lower risks of being withdrawn from the shelves if they had eco-labels and, most importantly, brands with line-caught labels stay longer on shelves even in the absence of eco-labels. However, the trend was noted to face a potential barrier during Brexit, which could change the fishing industry course (Symes and Phillipson, 2019). These findings imply that one strategy which UK fish businesses can employ to increase profits entails seeking MSC eco-labelling to show that their fish products are obtained from sustainable fishing practices that protect the environment.

Concerning consumer preference, Carlucci *et al.* (2015) noted that domestic brands were preferred over imports due to perceived high quality without considering the production method used. Therefore, wild, and farmed fish brands competed fairly in the market. In contrast, Asche *et al.* (2021) showed that farmed salmon products with local country of origin labels and eco-labels indicated a shorter life cycle than those with foreign origin labels. The difference between these findings can be attributed to the fact that different

retail chains vary in labelling brands. This suggests that product branding influences consumers' perception, and fish businesses should be actively involved in branding to ensure they convey the appropriate brand image to consumers. This shows that effective product branding strategies have a crucial impact on positively shaping consumer views.

Regarding core competencies, Saeed and Arshad (2012) highlighted that corporate social responsibility (CSR) gives firms a competitive advantage and can be used as a tool for product promotion. Their findings concur with Frynas (2015), who noted that CSR leads to value creation for firms, thus improving their preference. Other researchers have provided divergent views by noting that although CSR increases revenue in the food sector, the expenses associated with its implementation leads to no significant change in profitability (Mozas *et al.,* 2013; Costanigro *et al.,* 2016).

Sales Promotion Marketing in Fish Farming Sector

The fishing sector demonstrates various sales promotion strategies to market different brands. After the onset of the Covid-19 pandemic, Bennett *et al.* (2020) reported that marketing was mainly done on the online food network sites and supported by extensive direct deliveries. Simultaneously, there have been food-sharing initiatives that promoted fish brands by enhancing public relations. Stoll *et al.* (2015) concur and add that participation in incentives and improving communication skills with consumers was crucial in establishing a lasting bond of trust and loyalty for a particular fish brand. The authors reasoned that marketing in the fishing sector was supposed to change the paradigm to addressing consumer challenges. The findings imply that when using sales promotions to enhance profits, fish businesses should use narratives on the benefits of fish in preventing illnesses or improving recovery to create an emotional bond with consumers. Witter and Stoll (2017) also indicate that fishers need to promote market value as an alternative seafood marketing technique for higher profitability and popularity. In contrast, Duggan *et al.* (2020) explored alternative seafood marketing involving the cooperation of the different fishing arrangements, including trawlers and line fishers at small and large-scale levels. The study revealed that marketing through intermediaries was efficient in influencing the demanding attitude of

consumers. This implies that businesses could increase visibility among consumers during sales promotions to make them aware of price discounts and offers available that can promote purchases.

Anderson *et al.* (2018) showed that globalisation had invoked international marketing logistics in the fish industry. Therefore, wide media and internet coverage of fish brands is witnessed worldwide, even if the product is just enough for local consumption. According to O'Hara (2020), direct marketing, which is a characteristic of farmers' markets, had limitations such as small geographical coverage and problems of accessibility, especially for low-income individuals. Therefore, extended marketing through media and the internet was necessary.

Meanwhile, Chase and Otts (2016) note that seafood consumers were more concerned with the transparency of the supply chain from the boat to the table, which made direct marketing more suitable, and farmers markets appropriate. As such, there were off-the-boat sales and partnerships with fishery restaurants and community fisheries. Once in the retail store, Fonner and Sylvia (2015) indicate that the willingness by consumers to pay depends on the presence of labels, including quality, safety, ecolabel, and local. Therefore, the success of fish marketing relies on brand communication packaging, a strategy that can promote sales by influencing consumer purchases. From the literature, a key point noted is that providing price incentives to consumers to promote sales is not enough, and other strategies such as using effective brand communication on specific media platforms could generate trust and loyalty of consumers.

Market Positioning and Segmentation in Fishing Sector

Positioning in the UK fish market follows the global criteria of the nature of products as guided by policy and customer preference. Davies *et al.* (2018) noted that fisheries management is either classified as small-scale or large-scale depending on the vessel length. Specifically, vessels under 10-feet were considered small-scale and characterised with a small catch and a limited market size. Hadjimichael and Hegland (2016) indicated that market positioning in the fishing sector relied on sustainability

accomplishment. Essentially, the certification Marine Stewardship Council (MSC) determine whether a brand would rank high or low in the market. As such, fish brands with eco-labelling had a high advantage compared to the non-certified category. Gutierrez and Morgan (2015) support the view and emphasized that the sustainability movement for seafood had greatly influenced UK supply chains and market governance.

Cardwell (2015) showed that the formation of the UK fish market was also based on the weight of fish caught and sold by farmers and retailers. The author noted that the system was guided by fishing rights for fish weights for capture and selling. For small-scale fisheries, Prosperi *et al.* (2019) noted that some fish farmers adopted supply chain reorganisation, innovation, and diversification. The authors asserted that fishing regulations in the UK often changed to improve sustainability. Wakamatsu and Wakamatsu (2017) showed that the requirement of MSC eco-labelling was crucial for market positioning concerning sustainability. The study showed that small-scale fisheries had difficulties getting certification due to financial constraints. The findings imply that businesses that follow ethical and sustainable practices promote the image of fish businesses as caring and appeal to some consumers, thereby leading to higher sales.

Concerning market segmentation, classifications are based on customer attitudes about the attributes of fisheries. In this respect, Olsen *et al.* (2017) showed that consumers could be segmented into three categories: quality conscious; perfectionists; and careless consumers. Moreover, Zander and Feucht (2018) noted that seafood market segmentation also followed sustainability attributes whereby customers were either willing to pay higher prices, moderate willingness, and no willingness.

Methodology

Theoretical orientation

Resource-based View Theory (RBV)

This case study is anchored upon the resource-based view theory (RBV), first proposed by Jay Barney in 1991 (Barney, 1991). The theory argues that firms can possess strategic resources to achieve a competitive advantage over rivals in an industry (Barney, 1996). With the right resources, a firm can enjoy long-term superior performance, which contributes to high profitability. Barney (1991) noted that a firm should acquire valuable, rare, difficult to imitate, and non-substitutable capabilities and resources for an organisation to sustain a competitive advantage in the market. Essentially, valuable resources capitalise on the firms' opportunities and reduce threats (Kozlenkova *et al*., 2014). As such, possession of a valuable resource adds to the firm's strength in terms of exploiting new opportunities and hence taking advantage of the market. Meanwhile, resources that are difficult to imitate keep competitors from duplicating (Kozlenkova *et al*., 2014). A significant criticism of RBV is that it does not indicate managerial implications of how organisations should use the resources to obtain sustained competitive advantage (Bromiley & Rau, 2016). In this respect, even though some companies may have rare and valuable resources, a lack of knowledge of effectively deploying them may mean that the organisations do not develop a competitive advantage.

RBV theory was applied to this case study to explore how UK fish farming businesses can utilise marketing strategies to gain a competitive advantage. In this context, RBV can be used by businesses in innovative marketing strategies to present their fish products in a manner that enables customers to distinguish them from competitors. Moreover, the business can employ human resources and creativity to brand the products to better appeal to customers and enable them to gain a competitive advantage.

Social Capital Theory

Apart from resource-based theory, this case study can also adopt social capital theory, which argues that social networks can be utilized as a resource for a firm (Sandefur & Laumann, 1998). The theory contends that establishing social relationships with the community is a means of accumulating valuable human capital for spreading information about a product or service. However, the success of social capital for a

firm only comes from individuals in the network who also benefit from the firm (Schmid & Robison, 1995). Essentially, social capital theory works on a mutual benefit principle whereby the business must start by providing value to the relationship to gain free publicity and popularity, leading to consumer trust and loyalty. Consequently, a firm with adequate social capital can gain a competitive advantage in the market due to loyalty and reduced marketing costs (Häuberer, 2011). However, the process can be costly if the value created is not appreciated by the potential human capital.

A significant criticism of social capital theory is that it is not specific to a particular issue and considers a broad approach, making it challenging to know the best context of its application (Theodoraki *et al*., 2018). For the UK fish farming business, social relationships with the community of consumers can be used to achieve human capital for gaining a competitive advantage. Although the method may be cheap, it has sustainability challenges (Kreuter & Lezin, 2002). Therefore, the most appropriate theoretical orientation for this research is resource-based theory.

Research Philosophy

A research philosophy refers to how data for a study should be gathered and synthesised (Ryan, 2018). In this study, a pragmatism philosophy was selected to underpin the main concepts of the study. Morgan (2014, cited in Maarouf 2019) states that several researchers note a pragmatism philosophy is appropriate for mixed research methods due to its underlying assumptions. Pragmatism emphasises the transferability of research findings based on depth and breadth, made possible in as mixed methods approach. It also supports any method that enables a researcher to effectively conclude a particular study topic without placing restrictions on the method selected. Pragmatism was chosen in this study because it allows a researcher to work with quantitative and qualitative data (Tran, 2017). This is supported by the research questions to evaluate the extent to which product branding, core competencies, sales promotion, market positioning, and segmentation influence the competitive advantage of UK fish farming businesses.

Research Design and Strategy

A research design refers to the research framework that has been adopted to conduct the research (Bell *et al*., 2018). The research design makes it possible for the researcher to explore the various research methods and choose the most suitable for the current research topic. Qualitative research is often relied on to develop a theory about a particular topic (Hammersley, 2013). On the other hand, the quantitative method is used when statistical conclusions are necessary for making actionable insights (Vogt *et al*., 2012).

A mixed research design entails gathering both textual and numerical data to analyse a specific topic. This research utilises a mixed research method in which primary quantitative data was collected from participants and secondary textual data sampled from existing articles. Using a mixed research design ensures that any weakness of a quantitative method is addressed by a qualitative secondary method. This research applied an exploratory research design to perform an in-depth review on the research problem and establish the correlation between various marketing strategies and the competitive advantage of the UK fish industry. This is also supported by the research questions and how they influence the competitive advantage of UK fish farming businesses.

Research Approach

The inductive approach entails gathering data to develop a theory regarding a topic (Zalaghi & Khazaei, 2016). For this study, an inductive research approach was used in which qualitative and quantitative data were gathered to develop theories that answer the research questions regarding the extent to which product branding, core competencies, sales promotion, market positioning and segmentation influence the competitive advantage of UK fish farming businesses.

Data Collection

A questionnaire was circulated to five randomly selected trade associations that represent fish farming businesses; the respondent population size of n = 200 fish farming businesses in the UK. 10 questions were organized into 5 themes. The questionnaire sent to participants included questions sectioned into

parts based on their demographic attributes, product branding and competitive advantage, core competencies and competitive advantage, sales promotion and competitive advantage, marketing positioning and competitive advantage. It included questions which asked for a response using a 5-point Likert scale (Saunders *et al.,* 2019), and open-ended questions to gain more insight through contextual feedback and better understand the views of respondent about the survey subject. Selection of participants was based on random selection and therefore did not impose bias into the results (Saunders *et al.,* 2019). The link to the questionnaire was sent to five trade associations of fish farming businesses in the UK to reach their registered members. The participants had to be above 18 years of age with some level of experience in fish farming in the UK.

In addition, a systematic review of the literature was carried out because there is need for evidence about the likely effects of competitive marketing strategies, and there is a need for a general overview of competitive marketing strategies to direct further research (Saunders *et al.,* 2019). Inclusion and exclusion criteria were established (Table 1 refers) and the PRISMA (Page, *et al*., 2021) flow checklist (Figure 2 refers) was used to present the review.

Table 1 here

Inclusion Criteria	**Exclusion Criteria**
Articles published from 2012-2021	Secondary research papers, including systematic reviews conference abstract, or protocol papers
Studies which were conducted in UK and western cultures of Europe	Inconsistency between research objectives and findings

Studies on UK fish farming marketing strategies	Articles published in a non-English language
Primary studies involving sampled participants	

Fig 2 here

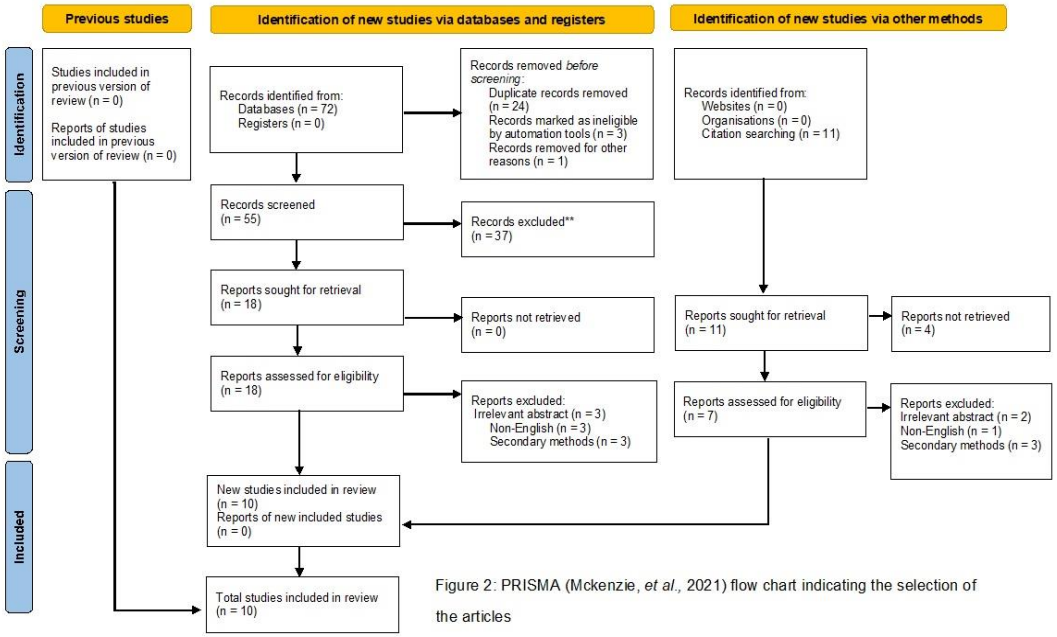

Figure 2: PRISMA (Mckenzie, *et al.*, 2021) flow chart indicating the selection of the articles

Figure 2 shows the PRISMA (Page, *et al*., 2021) chart in which 72 articles were identified from the original search conducted using the highlighted keywords. 11 additional articles were identified from the bibliography of the sampled sources, which were noted to be relevant to the current study. The first step involved identifying duplicated articles and were extracted from different databases even though they had similar titles. The duplicated articles were removed, and the remaining 55 articles were screened to check relevance with the current study. Specifically, the articles were checked to determine if they covered how to use marketing strategies to obtain a competitive advantage and published in English. Abstracts were reviewed because they gave a clear view of the articles, making it easy to select the most relevant articles. After the screening, 37 articles were excluded, and the remaining 18 articles were subjected to full-text assessment for eligibility. Each article was reviewed to clarify objectives, results, and conclusions. In addition, a check was done to determine whether there was a connection between research objectives, methodology, and findings obtained. After full-text review, 8 articles were excluded, ensuring 10 studies were chosen for analysis in this study. The ten sampled studies are indicated in tables in the appendix where the key data, including authors, methodology, findings, and conclusion are specified.

Questionnaire

Analysing the Marketing Strategies that Fish Farming Businesses in the UK Utilise to gain Competitive Advantage.

Part A: Demographic Attributes

Q1. What is your gender?

Q2. What is your age (Years)?

Q3. What is your level of education?

Q4. What is your level of experience in fish farming business in the UK?

Q5. What was your average annual revenue from your fish farming business over the last 3 years?

Q6. Based on your experience in the fish sector, to what extent does implementing marketing strategy influence the competitive advantage of your fish farming business?

Part B: Product branding and Competitive Advantage

Q7. To what extent do you agree with the following statements on how product branding influence competitive advantage of UK fish business?

- Poor branding means consumers cannot distinguish retailers' products
- Fish products that stay fresh for longer periods which can result in minimizing losses are considered good brands.
- Lack of eco-labels means consumers cannot determine whether fish retailer engages in sustainable practices
- Good product branding fetches premium prices since it earns consumer trust

Part C: Core Competencies and Competitive Advantage

Q8. To what extent do you agree with the following statements on how core competencies influence marketing and competitive advantage of fish businesses?

- Adequate training is provided to enable employees to market the fish products better
- The attitude of the management could improve the marketing of the fish products.
- Engaging in corporate social responsibility could give the company a positive image and increase their products' market value to retailers in the community

Part D: Sales Promotion and Competitive Advantage

Q9. To what extent do you agree with the following statements on influence of sales promotion on fish business competitive advantage?

- Advertising on food network sites improve sales
- Improving communication skills during direct marketing enhance sales by creating network of loyal customers
- Partnerships with restaurants and community fisheries enhance marketing of a retailer's product

- Using social media ensures customers can conveniently place orders and seek clarifications on products offered which increase sales

Part E: Market Positioning and Competitive Advantage

Q10. To what extent do you agree with the following statements on how market positioning influence competitive advantage of fish businesses in the UK?

- Identifying as a fish business following sustainable practices improves sales.
- Providing high quality packaging and fresh fish products attracts more customers and increases sales.
- Relying on social media segment to interact with targeted consumers and market fish products increases sales.
- Providing different types of fish products increases sales rather than relying only on one product line.

Presentation and Analysis of Results

Primary Research Results

The questionnaire results obtained are indicated in two parts. The first part shows participants' demographic data, while the second part indicates issues related to UK fish farming businesses consisting of SPSS (Statistical Package for the Social Sciences) output and comments by participants.

Presentation of Results of Demographic Data

The demographic data results showed that based on gender, 61% of participants were male while 39% were female. The participants' distribution based on age showed that most participants sampled were below 45 years (58.5%). However, the distribution of participants across all the age groups indicates that the findings obtained do not have age-related bias. Furthermore, the distribution of participants based on years of experience was also determined and most of the participants had over five years of experience

in the fish farming business. The distribution of participants based on their educational level revealed that most participants had a bachelor's degree as the highest educational level, followed by a high school level. However, some of the participants also had PhD and Master degrees. The distribution of participants based on annual business revenue showed that many of the participants earned an annual business revenue above £50,000 from their fish farming business. The sample also contained those who earned an annual business revenue that was less than £50,000, enriching the diversity in business performance opinions concerning competitive advantage.

Analysis of Demographic Data

The analysis based on gender showed that a higher percentage of male participants had more experience, higher level of education and higher business revenues than females as shown in table 2.

Table 2 here

Gender * Level of Experience Crosstabulation

			Level of experience				
			< 1 yr	1 - 5 yrs	6 - 10 yrs	> 10 yrs	Total
Gender	Male	Count	10	45	27	40	122
		% of Total	5.0%	22.5%	13.5%	20.0%	61.0%
	Female	Count	4	31	16	27	78
		% of Total	2.0%	15.5%	8.0%	13.5%	39.0%
Total		Count	14	76	43	67	200
		% of Total	7.0%	38.0%	21.5%	33.5%	100.0%

Gender * Level of Education Crosstabulation

			Level of education				
			High School	Bachelor's Degree	Master's Degree	PhD	Total
Gender	Male	Count	34	59	10	19	122
		% of Total	17.0%	29.5%	5.0%	9.5%	61.0%
	Female	Count	23	43	2	10	78
		% of Total	11.5%	21.5%	1.0%	5.0%	39.0%
Total		Count	57	102	12	29	200
		% of Total	28.5%	51.0%	6.0%	14.5%	100.0%

Gender * Annual Revenue Crosstabulation

			Average annual revenue				
			< £50,000	£50,000 - £100,000	£150,000 - £200,000	> £200,000	Total
Gender	Male	Count	17	59	42	4	122
		% of Total	8.5%	29.5%	21.0%	2.0%	61.0%
	Female	Count	6	44	26	2	78
		% of Total	3.0%	22.0%	13.0%	1.0%	39.0%
Total		Count	23	103	68	6	200
		% of Total	11.5%	51.5%	34.0%	3.0%	100.0%

Table 2: Comparing Participants' Gender with Experience, Education, and Annual Business Revenue.

Furthermore, analysis was done to understand the relationship between educational level and annual business revenue as shown in table 3. The results note that the average annual turnover of the business of some participants with PhD and High School education levels was over £200,000. Therefore, a further analysis was done by comparing participants' level of education with their experience as shown in table 4. 7.5% of participants with high school level of education have more than 10 years' experience, which is the third highest among other levels of education. The analysis in tables 3 and 4 shows that participants with a higher level of education and those with many years of experience have fish farming business that earn more income.

Table 3 here

Level of Education * Annual Revenue Crosstabulation

			Annual Revenue				
			< £50,000	£50,000 - £100,000	£150,000 - £200,000	> £200,000	Total
Level of Education	High School	Count	6	28	21	2	57
		% of Total	3.0%	14.0%	10.5%	1.0%	28.5%
	Bachelor's Degree	Count	14	52	35	1	102
		% of Total	7.0%	26.0%	17.5%	0.5%	51.0%
	Master's Degree	Count	3	7	1	1	12
		% of Total	1.5%	3.5%	0.5%	0.5%	6.0%
	PhD	Count	0	16	11	2	29
		% of Total	0.0%	8.0%	5.5%	1.0%	14.5%
Total		Count	23	103	68	6	200
		% of Total	11.5%	51.5%	34.0%	3.0%	100.0%

Table 3: Comparing Participants' Educational Level with their Annual Business Revenue.

Table 4 here

Level of Education * Level of Experience Crosstabulation

			Level of Experience				
			< 1 yr	1 - 5 yrs	6 - 10 yrs	> 10 yrs	Total
Level of Education	High School	Count	4	27	11	15	57
		% of Total	2.0%	13.5%	5.5%	7.5%	28.5%
	Bachelor's Degree	Count	9	46	19	28	102
		% of Total	4.5%	23.0%	9.5%	14.0%	51.0%
	Master's Degree	Count	1	3	1	7	12
		% of Total	0.5%	1.5%	0.5%	3.5%	6.0%
	PhD	Count	0	0	12	17	29
		% of Total	0.0%	0.0%	6.0%	8.5%	14.5%
Total		Count	14	76	43	67	200
		% of Total	7.0%	38.0%	21.5%	33.5%	100.0%

Table 4: Comparing Participants' Level of Education with their Level of Experience.

Participants' age and their annual business revenue were also compared as shown in table 5.

Table 5 here

Age * Annual Revenue Crosstabulation

			Annual Revenue				
			< £50,000	£50,000 - £100,000	£150,000 - £200,000	> £200,000	Total
Age	18 - 25	Count	8	21	4	0	33
		% of Total	4.0%	10.5%	2.0%	0.0%	16.5%
	26 - 45	Count	11	40	32	1	84
		% of Total	5.5%	20.0%	16.0%	0.5%	42.0%
	46 - 65	Count	3	26	22	3	54
		% of Total	1.5%	13.0%	11.0%	1.5%	27.0%
	> 65	Count	1	16	10	2	29
		% of Total	0.5%	8.0%	5.0%	1.0%	14.5%
Total		Count	23	103	68	6	200
		% of Total	11.5%	51.5%	34.0%	3.0%	100.0%

Table 5: Comparing Participants' Age with their Annual Business Revenue.

It is evident that the fish farming business of older participants (especially those within the age groups of 26 - 45 and 46 – 65) earned more than the younger ones. Participants' age with their level of experience and their level of education is compared as shown in table 6 and 7. Older participants had more years of

experience and a higher level of education compared with the younger ones, which could explain why they earned more.

Table 6 here

Age * Level of Experience Crosstabulation

			Level of Experience				
			< 1 yr	1 - 5 yrs	6 - 10 yrs	> 10 yrs	Total
Age	18 - 25	Count	2	31	0	0	33
		% of Total	1.0%	15.5%	0.0%	0.0%	16.5%
	26 - 45	Count	11	38	21	14	84
		% of Total	5.5%	19.0%	10.5%	7.0%	42.0%
	46 - 65	Count	0	6	19	29	54
		% of Total	0.0%	3.0%	9.5%	14.5%	27.0%
	> 65	Count	1	1	3	24	29
		% of Total	0.5%	0.5%	1.5%	12.0%	14.5%
Total		Count	14	76	43	67	200
		% of Total	7.0%	38.0%	21.5%	33.5%	100.0%

Table 6: Comparing Participants' Age with their Level of Experience.

Table 7 here

Age * Level of Education Crosstabulation

			Level of Education				
			High School	Bachelor's Degree	Master's Degree	PhD	Total
Age	18 - 25	Count	12	20	1	0	33
		% of Total	6.0%	10.0%	0.5%	0.0%	16.5%
	26 - 45	Count	26	49	3	6	84
		% of Total	13.0%	24.5%	1.5%	3.0%	42.0%
	46 - 65	Count	17	18	3	16	54
		% of Total	8.5%	9.0%	1.5%	8.0%	27.0%
	> 65	Count	2	15	5	7	29
		% of Total	1.0%	7.5%	2.5%	3.5%	14.5%
Total		Count	57	102	12	29	200
		% of Total	28.5%	51.0%	6.0%	14.5%	100.0%

Table 7: Comparing Participants' Age with their Level of Education.

Analysis of Results for Product Branding and Competitive Advantage

Eco-labels were the essential branding feature of the fish products for a competitive advantage, as indicated by the highest mean of 3.67 (aligning with Bronnmann and Asche, 2016 and Sogn-Grundvåg *et al.*, 2019). Meanwhile, the most accurate responses were registered for premium price products, as shown by the lowest standard error. At the same time, the variable had the lowest standard deviation. Therefore, providing fish products that stay fresh for longer increases the competitiveness of the fish business. The result was also supported by one of the comments from participants who noted:

"Fish is a perishable commodity and presenting to customer while it is still fresh increases trust and loyalty."

This finding reinforces the trend noted from statistical analysis and shows that the branding of fish businesses relies primarily on high-quality products that fresh fish exhibit.

Table 8 here

Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
Poor_Branding_Consumers_Cannot_Distinguish	200	4	1	5	3.01	1.020	.277	.172
Fish_Products_Stay_Longer_Good_Brands	200	4	1	5	3.03	1.010	-.080	.172
Lack_of_Ecolabels_Consumers_dont_Identify_Sustainable_Businesses	200	4	1	5	3.67	1.019	-.326	.172
Good_Products_Fetch_Premium_Prices	200	3	1	4	2.79	.789	.340	.172
Valid N (listwise)	200							

Table 8: Descriptive Statistics on how Product Branding Influence Competitive Advantage.

Analysis of Results for Core Competencies and Competitive Advantage

The most recognized attribute is the attitude of the management on improving the marketing efforts of fish products, as noted by the highest mean of 3.18. However, the attitude had the most significant standard deviation, which means that the responses were widely distributed from the mean. One of the comments of the respondents who supported the finding indicated:

"Although training employees about marketing is important, it is also crucial to ensure they have a positive attitude to attend to customers promptly such as by replying to messages and addressing complaints and concerns."

The quote reveals that the positive attitude of employees creates a competitive advantage to fish businesses by depicting the company as caring to consumers and seeking to address their needs.

Table 9 here

Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
Adequate_Training_to_Emloyees_Better_Fish_Marketing	200	4	1	5	2.90	1.012	.349	.172
Attitude_of_Management_Improve_Fish_Products_Marketing	200	4	1	5	3.18	1.039	.077	.172
Engaging_in_CSR_Increase_Products_Market_Value	200	3	1	4	2.55	.707	.537	.172
Valid N (listwise)	200							

Table 9: Descriptive Statistics on Core Competencies Influence on Competitive Advantage.

Analysis of Results for Sales Promotion and Competitive Advantage

The highly regarded sales promotion effort to influence competitive advantage involves a partnership with restaurants and fisheries, as noted by the highest mean of 3.69. The partnership variable exhibits a relatively small standard deviation and standard error, which means that most participants encouraged the strategy. Meanwhile, direct marketing communication was the minor preferred promotion technique with a mean of 3.03. The result was supported by one of the participants' comments which noted:

"We need to collaborate with restaurants and other stakeholders in the fish sector to ensure consistency of supply chain."

Table 10 here

Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
Advertising_in_Food_Network_Sites_Improve_Sales	200	4	1	5	3.42	.953	-.437	.172
Improving_Comm_Skills_During_Marketing_Enhance_Sales	200	4	1	5	3.03	1.136	.096	.172
Partnerships_Restaurants_Community_Fishering_Enhance_Marketing	200	4	1	5	3.69	.998	-.550	.172
Using_Social_Media_Marketing_Enhance_Sales	200	4	1	5	3.26	1.173	-.245	.172
Valid N (listwise)	200							

Table 10: Descriptive Statistics on Sales Promotion Influence on Competitive Advantage.

The quote showed that despite effective marketing by fish businesses, having partners ensures an efficient channel of supplying the fish products, preventing turnover and wastage (Stoll *et al.*, 2015, Bennett *et al.*, 2020, Duggan *et al.*, 2020).

Analysis of Results for Market Positioning and Competitive Advantage

Relying on the social media segment to interact with target consumers brings about the best market positioning for competitive advantage with the highest mean value of 3.39. The standard deviation for the variables is relatively the same, and the responses were spread close to the mean values. On the other hand, providing different types of fish products was least considered by the participants for competitive advantage with a mean of 2.75. There was one comment noted regarding market positioning, which indicated:

"Providing diverse fish products ensures you can reach different consumer segments and reduces the risk of turnover."

The quote shows that diversification is a crucial strategy employed in fish farming businesses to ensure consistent profits (Prosperi *et al.*, 2019).

Table 11 here

Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
Sustainable_Practices_Improve_Sales	200	4	1	5	2.93	.982	.119	.172
High_Quality_Packaging_Increases_Sales	200	4	1	5	3.30	1.037	-.273	.172
Consumer_Interaction_on_Social_Media_Increases_Sales	200	4	1	5	3.39	1.074	-.240	.172
Providing_Diverse_Fish_Products_Increases_Sales	200	4	1	5	2.75	.861	.507	.172
Valid N (listwise)	200							

Table 11: Descriptive Statistics on Market Positioning Influence on Competitive Advantage.

Analysis of Secondary Research Results

Product Differentiation in Improving Competitiveness

Three of the articles sampled (Onsøyen and Teslo, 2011; Srivastava *et al.*, 2017; Del Giudice *et al*., 2017) illustrate the concept of product differentiation. From the article by Onsøyen and Teslo (2011), brand positioning achieved through product differentiation enables product preference, thereby improving the competitiveness of brands. Brand differentiation also introduces market control for firms through the gained brand loyalty from consumers. The ideas are consistent with those observed from Srivastava *et al.* (2017), who note introducing new production techniques as one of the strategies of establishing a sustainable competitive advantage. Sultan and Chashti (2017) added that firm competitiveness could be enhanced by using the new production techniques to ensure that brand products stand out from the rest of the competitors, improving brand visibility. Similarly, Del Giudice *et al*. (2017) indicate strategies that enhance collaboration between employees and employers to establish innovative practices aim at realizing a competitive edge over the competitors. Therefore, product differentiation is a potential strategy that the UK fish industry can leverage to improve visibility and competitiveness.

Analysis of Innovativeness and Competitiveness

Three of the articles sampled gave insights on the concept of innovativeness (Shibeika and Harty, 2015; Srivastava *et al.*, 2017; Mohamad and Zin, 2019). From the article by Shibeika and Harty (2015), industry innovations such as infrastructure improvements, communication innovativeness, and inter-organizational professional work are essential in establishing competitiveness for firms through improved productivity and reduced production costs. Similarly, Srivastava *et al.* (2017) indicate that innovations aimed at product differentiation have proved effective in ensuring firm competitiveness. The innovation practices also leverage on lowering production costs through introducing efficiency to production activities. Mohamad and Zin (2019) explain that knowledge management enables firms to grow talents and skills that lead to product innovativeness. Product innovativeness can be crucial in realizing customer loyalty hence continued repeat sales. Competitiveness through innovation can also be realized through innovative packaging that markets the product and protects the environment. Therefore, innovativeness by firms is a vital aspect in obtaining brand competitiveness.

Analysis of Research and Development in Improving Competitiveness

Three articles (Ogunbiyi, Goulding and Oladapo, 2014; Huggins and Williams, 2011; Borgo *et al*., 2013) indicated various insights connected to research and development. From Ogunbiyi, Goulding and Oladapo (2014), research activities focused on the development of lean production options can lead to reduced production costs and increased profitability. Companies that initiate such research should focus on enhancing sector collaboration to acquire markets that enhance the reduced cost of sales and cheaply acquire raw materials. Moreover, Huggins and Williams (2011) observe that the formulation of policies that support start-ups should invest in research and development to ensure efficient and effective production options that meet consumer expectations. Similarly, Borgo *et al*. (2013) highlight that companies should improve research and development and investment in knowledge to improve their competitiveness. Research and development will lead to efficient human resource management and effective management of production activities for sustainable production, hence increased profitability.

Discussion

Demographic Data Trends

Male participants earned higher annual revenues in their businesses compared to females. The trend was attributed to a higher percentage of the male participants having higher educational level and experience, which enabled them to engage in the best practices and gain a competitive advantage. Participants with a higher level of education and many years of experience have fish farming businesses with higher average annual turnover. Thirdly, older participants had more years of experience and a higher level of education compared with the younger ones. These findings reveal that some participants gained knowledge through education while some acquired it through many years of experience in the fish farming business, which they may have utilised to gain a competitive advantage in revenue generation. This is consistent with the views of Goddek *et al*. (2015), who state that success in aquaculture requires in-depth knowledge for fish farmers to achieve cost efficiencies and eliminate wastage.

Product Branding and Competitive Advantage

Eco-labelling of brands was the highest contributor of competitive advantage for the fish farmers. The implies that despite the uniqueness of specific product brands, consumers placed a central focus on the sustainability aspects of the producers. Therefore, a combination of distinctive branding and green production certification enhanced the value of the fish product and contributed to a larger market share.

Srivastava *et al*. (2017) show that knowledge and expertise of product differentiation contributed to branded techniques, including unique packaging, which increased the competitiveness of the fish products.

Key point:

- Brand eco-labelling increases competitive advantage, and the quality of fish is evaluated based on shelf-life. These findings support RBV theory (Barney, 1991), which noted that firms should

acquire valuable, rare, difficult to imitate and non-substitutable capabilities and resources for an organisation to sustain a competitive advantage.

Core Competencies and Competitive Advantage

The quantitative results suggest that the attitude of the management towards fish marketing significantly influences the competitive advantage of the businesses. This finding implies that the management of fish production firms in the UK has a significant responsibility of making effective decisions towards efficient marketing techniques; the management's action can either improve or reduce the competitive advantage potential of the fish businesses. From the qualitative results, it was noted by Borgo *et al*. (2013) that research and development in the fish companies enhanced core competencies that attributed to innovation of cost-effective ways while improving product value.

Key Point:

- Fish farming businesses should demonstrate positive attitudes in marketing, effectively train employees, and employ CSR practices to achieve competitive advantage. RBV theory argues that firms can enjoy long-term superior performance which contributes to high profitability and hence, competitive advantage (Barney, 1991).

Sales Promotion and Competitive Advantage

The results indicated that all the four variables of advertising of network site, improving communication skills in direct marketing, partnership with restaurants and community fisheries, and using social media had a significant relationship with competitive advantage. This finding implies that fish farmers must pay careful attention to sales promotion strategies since it helps inform the consumers about the products and establish the brands. This reveals that with a positive relationship with the population based on popularity, fish farmers were better positioned to win buyers' trust, leading to a competitive advantage.

Meanwhile, statistical results indicated that partnership with restaurants and community fisheries was the highly regarded initiative of sales promotion. The results imply that some consumers of fish products only trust middlemen such as restaurants to evaluate the quality of the fish. At the same time, online advertisements were effective based on the statistical significance of the correlation.

Srivastava *et al.* (2017) showed that product visibility enhanced the competitive advantage. Essentially, the new product differentiation features must be relayed to the potential consumers to positively change their attitudes towards the products. In that respect, sales promotion supports the goals of product differentiation.

Key Point:

- Sales promotion strategies such as using discounts are essential in achieving a competitive advantage. Similarly, partnership with community fisheries and restaurants increases competitive advantage. Firms can possess strategic resources to achieve a competitive advantage (Barney, 1991).

Market Positioning and Competitive Advantage

Market positioning did not significantly affect competitive advantage for the fish business. Specifically, identifying a business that followed sustainable practices, high-quality packaging, relying on social media segments for consumers, and providing different types of fish products, only contributed to 2.64% of competitive advantage. The findings imply that the consumers are used to marketing positioning strategies as nearly all the fish farmers practise them. Therefore, more advanced strategies are necessary for competitive advantage.

From qualitative results, the efforts of differentiation are related to the high-quality packaging positioning. According to Srivastava *et al.* (2017), the technique improved the competitiveness of the fish brands. Battaglia *et al*. (2014) reported on the effectiveness of ensuring production efficiency by

taking environmental consideration into account. Notably, the qualitative results from the secondary data concur with the literature on the impact of market positioning on fish product competitiveness. The variations in findings between the literature and this research imply a change of strategies over time on competitive advantage matters. Whereas market positioning served well in the past as an efficient, competitive technique, data from this research shows that things are changing, and the impact is not as pronounced as before. Consequently, there is a need for the fish farmers in the UK to break from the traditions of market positioning for competitiveness since they are common, and the outcome is insignificant.

Key point:

- High-quality packaging positioning is essential in increasing sales and the competitiveness of fish farming businesses. Firms should acquire valuable, rare, difficult to imitate and non-substitutable capabilities and resources for an organisation to sustain a competitive advantage (Barney, 1991).

Summary of Implications

- Brand eco-labelling increases competitive advantage, and the quality of fish is evaluated based on shelf-life. These findings support RBV theory (Barney, 1991), which noted that firms should acquire valuable, rare, difficult to imitate and non-substitutable capabilities and resources for an organisation to sustain a competitive advantage.
- Fish farming businesses should demonstrate positive attitudes in marketing, effectively train employees, and employ CSR practices to achieve competitive advantage. RBV theory argues that firms can enjoy long-term superior performance which contributes to high profitability and hence, competitive advantage (Barney, 1991).
- Sales promotion strategies such as using discounts are essential in achieving a competitive advantage. Similarly, partnership with community fisheries and restaurants increases competitive advantage. Firms can possess strategic resources to achieve a competitive advantage (Barney, 1991).

- High-quality packaging positioning is essential in increasing sales and the competitiveness of fish farming businesses. Firms should acquire valuable, rare, difficult to imitate and non-substitutable capabilities and resources for an organisation to sustain a competitive advantage (Barney, 1991).

Conclusion

Product branding is showed to exhibit a significant positive correlation with the competitiveness of the UK fish farming businesses. Specifically, eco-labels and fish products that stay fresh for longer durations were the main branding techniques that stood out as the most significant influencers of competitive advantage. Results also showed that the level of core competencies in efficient marketing, management training and CSR practices could contribute to the competitive advantage of fish farming businesses in the UK.

A significant positive relationship is depicted between sales promotion and competitive advantage. Specifically, partnerships with restaurants and community fisheries and online network advertising of the fish product sites improved competitiveness. Consequently, sales promotion qualifies as an effective marketing strategy, which UK fish businesses can harness to obtain a competitive advantage. Generally, marketing strategies are seen as a crucial means of improving sales performance when effectively utilised by fish businesses.

Market positioning had an insignificant correlation with competitiveness. For instance, although using social media segments to interact with customers contributed to competitive advantage, the impact was not as effective as expected. However, the qualitative results contradicted the findings by indicating a significant positive correlation. Based on the current statistics, it can be concluded that the effect of market segmentation for high fish sales in the UK faded over time since the qualitative results were based on secondary sources. Therefore, marketing segmentation is not an effective marketing strategy for the UK fish farming business to gain a competitive advantage. Instead, the farmers should focus on key

competencies, which have been shown to have a considerable positive impact on consumer preference by both the qualitative and quantitative results.

Demographic data trends revealed that knowledge could be gained through education or experience, and these two contribute positively to the success of fish farming businesses. In this respect, it is realized that marketing strategies should be hinged on encouraging fish farmers to acquire more knowledge on fish farming business management.

Limitations

The scope of the research is limited to the UK. The findings cannot be generalised and used for other jurisdictions because of variable economic and market conditions.

Recommendations for Theory

Further research is warranted within the UK to understand the subject of fish business competitive advantage. Specifically, future studies should employ a primary approach for the qualitative section to update the potential marketing strategies.

Recommendations for Practice

UK fish farming businesses should take marketing strategies and acquiring more knowledge seriously and allocate adequate capital towards them since they hold the key to competitive advantage. Extensive market research is required to understand the surrounding factors and economic players concerning consumer purchasing behaviour of fish products to optimise success. Fish farmers should be creative and innovative in ways such as leveraging branding, sales promotions, and core competencies to convince consumers and win their trust. Most importantly, each fish business should know the specific marketing strategy that works for them. For instance, not all branding and sales promotion techniques enhance competitiveness.

Data Availability Statement

Data that support the findings of this study are available on request in UCLanData repository at (DOI): https://doi.org/10.17030/uclan.data.00000304

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APPENDICES

Appendix A: Secondary Research Articles Summary

Author (Year)	Research Objectives	Methodology	Findings	Conclusions
Borgo et al. (2013)	To better measure growth and its sources for the UK economy to understand factors that create competitive advantage in UK industries.	Measuring the output as well as the various employment and capital level of 71 industries.	The main factors that industries across Europe leverage on to improve competitive advantage include research and development, branding, training, knowledge investment and copyright registrations.	Industries should improve research and development as well as investments in knowledge to improve their competitiveness. Knowledge development is done through research and development.
Huggins & Williams (2011)	To investigate the role of policy progression in enhancing entrepreneurship and regional competitiveness**.**	Analysis of data obtained from semi-structured and in-depth interviews as well as relevant policy documents	The main strategies to realise sustainable competitiveness include regional policy formulations that stimulates economic drivers such as access to capital, business support and innovations.	Policies that aim at supporting start-ups should be enhanced to create regional competitiveness. The regional competitiveness of firms is concerned with ensuring that firms efficiently and effectively meet customer requirements and demands.

Del Giudice et al. (2017)	To investigate the actions taken at micro-level s by owner-managers in improving sustainable competitiveness of small and medium enterprises.	Drawing insights from 5 representatives of SMEs from both the UK and Italy.	Owner-managers play a key role in initiating activities in collaboration with employees to improve sustainable competitiveness.	There is a close relationship between SME owner-managers' approaches to sustainability and to HR management. SME owner managers should establish efficient human resource activities that enhance production efficiency.
Ogunbiyi, Goulding & Oladapo (2014)	To investigate the impact of lean construction techniques on sustainable competitiveness in the UK	Survey of UK-based construction professionals.	Lean production activities lead to improved corporate image, improvements in environmental quality and compliance with customer expectations which all lead to competitive advantage. Lean production activities aim at minimum production and maximum outputs.	By adopting lean production, UK industries can significantly enhance their competitiveness through factors that improve customer focus.
Srivastava, *et al.,* (2017)	To establish an understanding of the influence of innovation on the firm-level competitiveness.	A survey of 75 agro-food-based manufacturing units. Data collection was done using a well-structured questionnaire that is based on 5-point Likert scale.	Innovation competencies including new product introduction, innovations in human resource, new manufacturing processes and establishing quality testing procedures as well as procuring of materials at low cost are some of the	Investments in firm-level competitiveness enhancements are a key strategy that can be employed by firms in enhancing firm-level competitiveness to improve the sustainable competitiveness of the small and micro level enterprises.

			strategies to enhance firm-level competitiveness.	
Maletič et al. (2014)	To establish the role of maintenance in improving the competitiveness and profitability of companies.	A case study of a textile company in improving the business of a company.	The highest opportunity for improvement in the productivity efficiency, profitability as well as competitiveness of companies is presented by establishing efficient maintenance activities.	Companies should establish maintenance activities to ensure efficient production that will reduce production expenses and maximise production to maximise profitability and firm competitiveness.
Battaglia et al. (2014)	To investigate the influence of corporate social responsibility in enhancing the competitiveness of firms.	Survey on the impacts of CSR activities in improving the competitiveness of firms. The standard questionnaire was created according to the OECD survey	The findings indicated that CSR could lead to innovation, improved market performance and intangible performance of firms thus improving their competitiveness. Moreover, CSR also improves a positive image of the firm on the eye of the public.	There exists a strong and positive correlation between the CSR-related activities and competitiveness. In terms of innovation as well as intangible performance.
Mohamad &Zin (2019)	To determine how knowledge management contributes to the competitiveness of small construction firms by analysing innovation as a mediator to competitiveness.	Self-administered questionnaires applied in collecting data from small construction firms in Malaysia. A total of 190 construction firms were surveyed with 153 respondents	Knowledge management directly and significantly influences firms' competitiveness positively. Technical and administrative innovations also play a significant impact in	By leveraging on technical and administrative innovations, firms can enhance knowledge management to realise sustainable firm competitiveness. The knowledge management should involve all stakeholders in order to achieve benefits to all the parties concerned.

		returning their completed questionnaires.	mediating the knowledge management practises.	
Onsøyen & Teslo (2011)	To investigate the importance of brand positioning practises in improving the performance of the Norwegian fishing and aqua culture industry.	Mixed research approach. Primary quantitative data was collected by survey of 100 companies. The questionnaire applied in data collection internet based and self-administered.	Brand positioning determines the competitiveness of the Norwegian fish industry by influencing customer perception of brands and brand image. Positioning can be achieved by product differentiation from those of competitors to boost product sales hence firm competitiveness.	Firms should leverage on brand positioning to male their brands visible and attractive to the consumers.
Shibeika & Harty (2015)	To determine the diffusion of digital innovation in improving the competitiveness of firms.	Four fieldwork phases involving interaction with firms to understand their technology status quo, innovative activities and strategic initiatives for the diffusion of technologies.	The main technological innovations that positively influence firm competitiveness include technologies for infrastructure delivery, innovative communication channels and inter-organizational professional work.	Firms aiming at achieving competitiveness should invest in factors that enhance technology management to realize innovativeness that enhances minimum production expenses and improves production efficiency. Innovation management should be led by the management through activities such as restructuring and balancing supply with demand.