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Evaluating the potential existence of an environmental legitimacy gap: An empirical assessment of the Irish meat industry.

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Abstract

This paper investigates the environmental legitimacy of the Irish meat industry from the perspective of the consumer. Specifically, the focus lies on the new context surrounding the meat industry and uses the legitimacy theory as a framework to address a possible legitimacy gap regarding the environmental activity of these firms. A quantitative questionnaire of 302 consumers revealed 3 clusters based on their meat intake. Each cluster indicates a positive overall opinion of these firms, however, their environmental performance is considered weak and imposes a threat to legitimacy. The findings are examined to reveal implications for these firms on which strategic recommendations are constructed.

Keywords

Environmental legitimacy; meat consumption; consumer perception; communication

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Table of Contents

1. Introduction

Gaining and maintaining social acceptance has become critically imperative for today's firms, especially those operating in sectors with a considerable effect on the natural environment. This concept of social acceptance and approval is widely regarded in theoretical literature as a firm's legitimacy, which measures the adequacy of business behaviour compared to societal expectations (Lindblom, 1993). However, legitimacy as noted by Lindblom (Ibid.) is dynamic and the relevant publics continuously evaluate corporate actions against evolving expectations. Therefore in light of the growing trend of consumption as voting, whereby consumers are increasingly willing to pressure companies to behave more responsibly (Moraes et al., 2011) the communication of corporate social responsibility (CSR) and sustainability initiatives has become an ever more important means by which organizations can validate their legitimacy. With legitimacy and satisfied stakeholders comes the assumption that the long-term survival of the organisation can be safeguarded as the financial performance of a company is ultimately built on market performance which is dictated by consumers (Hillman & Keim, 2001).

The meat industry is one of several industries to come under pressure regarding its carbon footprint and its environmental legitimacy has been brought into question. This paper recognises in particular the role of consumer perception and behaviour in explaining the recent surge in popularity of the non-meat movement and the growing trend of plant-based diets. Whereas previous studies have focused on multi-layered motives for meat avoidance and identified influences, this paper is the first known in the peer reviewed literature to report on the possibility of an environmental legitimacy gap between consumer perceptions and expectations regarding the sustainability initiatives of the industry. The present study used the broad literature base as a starting point for a quantitative survey to reveal clusters of similar consumers. The uniqueness of this paper is its focus on the industry in the context of Ireland, a country with an intrinsic connection to farming and agriculture, both in terms of national identity and economics. Furthermore, environmental legitimacy is still an under-researched area and has not yet been applied to the meat industry. The findings of this paper will help the management of meat companies to identify which legitimacy strategy may be best to pursue, discover potential partners for this endeavour and ultimately gain a better understanding of its customers. Thus, the research question is the following: is the Irish meat industry suffering from an environmental legitimacy gap in its sustainability messaging to domestic consumers?

This paper is organised as follows; first a brief literature review provides the context of the changing conversation surrounding the meat industry, the legitimacy theory is then presented as the analytical framework and the industry's communication challenges are examined in line with legitimation. It is a critical analysis of what researchers have said on the subject and leads to the formulation of the hypotheses. The third chapter outlines the quantitative methodology applied and explains the development of the questionnaire. The findings of the consumer data are then analysed and the results are discussed. The sixth chapter summarises the main conclusions and recommendations for Irish meat companies in relation to the theoretical framework while acknowledging some limitations and outlining suggestions for future research on the topic.

2. Literature Review

2.1 The Irish meat industry in a local and global context

The agri-food sector is one of the fastest growing sectors of the Irish economy and one of the most important indigenous industries. The red meat industry (beef, lamb and pork) alone generates exports valued at €2.5bn, employing approximately 70,000 farmers in rural areas underserved by Foreign Direct Investment (Meat Industry Ireland, 2016). Following the financial crisis in 2008, Ireland's food and beverage industry was identified by the government as a potential source of high value exports. From there the Origin Green Programme was born with the idea to commit the entire industry to sustainability targets, brand the efforts and thereby increase demand abroad for Irish food products through intensive marketing campaigns (Shelman et al., 2016). The success of this programme, since its launch on the market in 2012, formed the basis for the Foodwise 2025 initiative which aims to maintain momentum and increase the value of exports to a total of €10bn, resulting in the creation of 23,000 more jobs (Meat Industry Ireland, 2016). Despite the sustainability initiatives that have been implemented so far by the meat industry as part of Origin Green, environmental groups like An Taisce (2019) are skeptical of the actual progress being made. Among others they have pointed out the inherent contradiction in simultaneously increasing production while attempting to reduce the environmental footprint of the industry. Their concerns were confirmed by a recent UN model (Ibid) which found Ireland to be the most carbon-intensive beef producer in Europe with the highest level of greenhouse gas emissions per agricultural output in the EU.

The Irish meat industry stakeholder map comprises of many members along the value chain most notably: a) the raw producers (farmers), b) meat processing and production companies, c) Bord Bia (the Irish food board), d) retailers (butchers, supermarkets and wholesalers) and e) the general public (consumers and employees). Meat processing and production is dominated by three major players (Kepak, Dawn Meats, ABP Foods) who account for 60% of the market (Farmers Weekly, 2018). However, these meat companies suffer from low brand recognition given the fact that 60% of Irish consumers purchase meat in independent butchers where no brands names are displayed (Hornibrook et al., 2005). The remainder of the meat-eating population buys in supermarkets where meat is sold under the retail brand name and factors such as meat colour and the presence of fat are among consumer's highest influences at the moment of purchase (Troy & Kerry, 2010).

Given the multiple developments that took place in 2019, this paper is grounded in the new context surrounding the meat industry. The year began with the publication of the EAT-Lancet Report (2019) which recommended a 90% reduction in individual meat intake. This was followed in April by the hugely successful IPO of Beyond Meats, a plant-based meat substitute, which bolstered the momentum behind the plant-based movement. Next came the launch of *Equals*, the first meat alternative by ABP Foods, one of Ireland's most prominent meat producers. This is in line with the strategy of global giants like Tyson Foods and Memphis Meats that have reacted to the new market conditions by acquiring, investing in or launching their own substitutes. Furthermore, with meat taxes entering the political and regulatory agenda in Germany, Denmark and Sweden a price increase may be the next significant challenge for the Irish meat sector.

2.2 Legitimacy Theory

Although the context surrounding the meat industry has undergone a substantial transformation in the past year, previous academic research provides some valuable insights for the purpose of this study. Multiple authors have highlighted the special status that meat holds in many societies (Apostolidis & McLeay, 2016; de Boer et al., 2013). Meat is generally perceived by consumers as a key part of a healthy diet and they are resistant to change due to lack of information, unfamiliarity with meat alternatives as well as limited choice of a substitutes (Macdiarmid et al., 2015). Given that farmers are the natural custodians of Irish land, an all-out war on meat is unlikely but there are signs of falling demand, especially among younger consumers. Flexitarianism, a diet in which people actively reduce their meat intake, but occasionally still eat meat, has grown in strength. Campaigns such as Meatless Monday and Veganuary have helped to encourage this less drastic, more approachable lifestyle change. This staggered approach to changing consumer behavior and consumption is in line with the recommendations of authors who have researched dietary phenomena and highlighted the role of gradual societal transition (de Boer & Aiking, 2017). Previous studies within the domain of consumer behavior and attitudes related to meat consumption, have focused on the knowledge gap amongst consumers regarding the negative impact of meat production and consumption on climate change (Austgulen et al., 2018), the high level of consumer fatigue regarding dietary choices and information (Macdiarmid et al., 2015) and determinants of meat consumption such as status and social pressures (Bisogni, et al., 2012). Reducing meat intake on the other hand has been attributed to a number of factors most notably concern for animals, health reasons and environmental views (Hoek et al., 2016).

Institutional theory, namely legitimacy theory, will be used to examine consumer perceptions and expectations in order to build on the aforementioned academic perspectives in the present context. A core assumption of Institutional theory is that satisfied stakeholders will endow organisations with legitimacy that allows for their long-term survival and development (DiMaggio and Powell, 1983). Traditionally the purpose of business was to create value for its financial shareholders. In modern times however, a new view of business has emerged in which business, as a powerful institution, should assume broader responsibilities towards all of the stakeholders it affects in its operations. The legitimacy theory derives from this fact that companies do not exist in a vacuum. Indeed, according to Matthews (1993) there is a social contract between the firm and members of society, by whose terms the corporation is expected to comply. The most widely referred to definition of legitimacy by Suchman (1995), which serves as the basis for this study, considers it to be "a generalized perception or assumption that the actions of an entity are desirable, proper or appropriate within some socially constructed system of norms, values, beliefs and definitions." The emphasis is therefore on acceptance and approval by stakeholders. Based on this definition and reasoning the first hypothesis was developed:

Hypothesis 1: Consumers think that meat companies' current environmental actions are inadequate and need to be improved.

As previously noted, legitimacy is far from static and depends on ever evolving societal expectations. If the expectations of stakeholders undergo a transformation and no longer correspond to the goals and outputs of a firm, then a legitimacy gap may appear. Stakeholder's expectations can be influenced by a multitude of factors including but not limited to evolving social awareness, media influences, corporate crises and regulatory pressures (O'Donovan, 2002). These pressures may evolve individually and later become mutually reinforcing. In the case of the meat industry one can see many of these pressures coming into play in the past few years. Social awareness regarding the effects of meat in climate change increased, in no small part to documentaries such as *Cowspiracy* and *Forks Over Knives* by commercial producers like Netflix. Media influence can be seen by the designation of 2019 as *The Year of the Vegan* by leading publications The Economist and Forbes magazines. Furthermore, the meat industry in Ireland has been in the public spotlight due to the recent corporate crisis surrounding the farmer protests against falling beef prices (The Irish Times, 2019).

The existence of a legitimacy gap is a serious threat to a firm or industry, as it can give rise to penalties, predominantly economic, social and legal in nature (Suchman, 1995). Economic penalties can imply a boycott of a company's products by a reduction in consumption. Past studies suggest that the consumer is already economically penalizing the Irish meat industry. In 2011 Leahy et al., found that the proportion of the Irish population avoiding meat was increasing. These findings were reinforced by a more recent study carried out by the Irish food board, Bord Bia (2018), which revealed a sustained and steady consumer trend towards meat reduction, especially amongst younger members of society. Penalties can also be social and include challenges such as difficulty sourcing labor, the existence of negative publicity campaigns and stakeholder lobbying. In this context, there is also evidence that the Irish meat industry has been socially penalized. Recently there have been many negative campaigns which question the industry's right to exist including reports from An Taisce (2019), Ireland's pre-eminent environmental group. These circumstances suggest that society's expectations have changed and helped to generate the second hypothesis.

Hypothesis 2: Irish consumers consider themselves to be more environmentally concerned than meat companies.

Depending on the context, Suchman (1995) posits that an organization will usually apply one of three strategies to deal with legitimacy issues. For a company which is venturing into a new area of business in which it has no past reference, a strategy to gain or extend legitimacy will be employed. In the case that a company enjoys a certain level of societal approval and is facing no particular legitimacy challenges then the aim will be to maintain the current standing through strategies which support a stable dialogue between the company and society, where past achievements and continuous efforts are highlighted by means such as trade shows, CSR activities and advertising. In the case that legitimacy has been severely compromised, organizations will strive to restore and repair it by providing an increased amount of environmental and social disclosures that justify and explain the situation (Deegan et al., 2000). Legitimacy management has been further divided into two types of principal actions, symbolic and substantive (Berrone et al., 2009). Substantive management involves truly meaningful actions to improve corporate processes, structures and goals such as environmental patents and pollution prevention practices. Symbolic management on the other hand involves the use of gestures and association which makes the audience believe that the organization is taking steps in the right direction. These gestures include participation in voluntary environmental programs and the promotion of green trademarks. Berrone (Ibid.) found that both of these measures improve legitimacy but only substantive actions achieve sustainable and significant stakeholder satisfaction. These strategies must be targeted at groups which O'Donovan (2002) terms as the firm's 'conferring publics', who have the necessary attributes to confer or withdraw legitimacy.

The most salient topics are of greatest importance to a firm since the public perception of these topics can influence legitimacy as a whole (Chung et al., 2016). For reasons already outlined, the context surrounding the Irish meat industry has changed and these companies have come under more intense scrutiny regarding their carbon footprint. Therefore, this paper will examine legitimacy from the environmental perspective to better understand whether Irish consumers perceive the environmental performance of Irish meat companies to be adequate and proper. A high level of environmental legitimacy has been associated with the following advantages: support of stakeholders resulting in better trading conditions and resources, a reduction in the number of costly inspections and lastly and most importantly, a highly positive contribution to a high level of profitability (Bansal and Clelland, 2004).

The majority of empirical research into environmental legitimacy management has thus far focused heavily on repairing and resolving an organization's legitimacy in the face of a public crisis (Patten 1992). Other research has examined environmental legitimacy in industries such as the forestry industry (Panwar et al., 2014), pharmaceuticals (Chung et al., 2016) and the media (Bachmann & Ingenhoff, 2017). De Roeck & Delobbe (2012) looked at environmental legitimacy from the perspective of employees of an oil company while other papers have tended to examine the effects of environmental legitimacy from the perspective of the investor and are often measured by media content analysis. Thus, this paper contributes to academia by applying environmental legitimacy theory to the Irish meat industry and evaluating the consumer perspective by means of a direct questionnaire.

2.3 Communicating legitimation strategies

Despite the identification of these legitimacy strategies, most companies choose CSR practices to maintain their legitimacy since it is a principal method of communication and engagement with stakeholders. This can be seen not only as a reflection of the increasing awareness of managers of the role of a company in society but also of the intrinsic dependency of legitimacy management on communication (Dowling & Pfeffer, 1975). Therefore the majority of studies examining legitimacy have done so from the perspective of annual CSR report disclosures. While it is often pointed out that consumers show market preferences for companies with strong environmental and social concerns, there is also evidence that these activities do not always achieve their desired effects such as improved customer satisfaction, trust and purchase intention (Vlachos et al., 2008). Furthermore, CSR activities are only worthwhile if the company's motives are perceived to be sincere by the consumer (Yoon et al., 2006). Recent research carried out on Austrian consumers shows that consumers consider CSR communication that is disseminated through external sources to be more credible than internal sources such as company published reports (Gruber et al., 2017). This sheds a new light on managing legitimacy through communication especially when considering the media-setting agenda theory. This theory indicates that media and public opinion are closely aligned as many individuals rely on the media as a primary source of information particularly for unobtrusive issues such as those related to the environment (Aerts & Cormier, 2009). A study by Jones (2017) into media coverage of farming found that there is often a deep urban bias that leads to scepticism and negativity when it comes to environmental matters. For the Irish meat industry the situation is even more complicated since chronically low levels of brand awareness makes meaningful communication and relationship-building with the consumer an arduous task. This is compounded by the lack of important consumer touchpoints such as branding on packaging, advertising or a strong online presence. Thus far Irish meat companies have relied heavily on Bord Bia for their communication through the Origin Green programme but the focus has been predominantly on B2B marketing rather than consumers. In a world where consumers are increasingly looking to connect emotionally to their brands via content and story-telling (Pulizzi, 2012), meat companies' weakness in this regard represents a significant challenge for effective communication. This rationale generated the final hypothesis:

Hypothesis 3: There is a low awareness of the sustainability initiatives of meat companies among Irish consumers.

3. Methodology

3.1 Sample and Procedure

For this work project a quantitative questionnaire of Irish consumers was carried out for the purpose of data collection. The questionnaire was made available online using Qualtrics software. There are multiple studies which prove the validity of online questionnaires and cite advantages such as convenience for respondents, high completion rates and lower risks associated with social desirability bias when compared to other forms of data collection (Moy & Murphy, 2016). Measures were taken to optimize the experience for respondents including a graphical progress indicator, clear answering instructions and comfortable design for use on a mobile device. In line with academic best practices, the questionnaire was thoroughly analyzed in a pilot test with 15 consumers before being made widely available. This allowed for the correction of ambiguities to ensure the collection of reliable, valid and useful data.

A quantitative approach was adopted in order to understand present conditions and reveal patterns and consistencies that thereby provide a general overview of Irish consumers' environmental perceptions and expectations of the meat industry. Non-probability, convenience sampling was used due to financial constraints, time limitations and the channels available in the context of a Masters' thesis. Standard socio-demographic questions were included to determine the respondent's gender, age group, residence, education level and diet of choice. Only consumers aged 18 years and older were eligible to take part. The questionnaire was developed via a literature research which generated measures used in previous studies that were then adapted to the context of the Irish meat industry. These questions were subsequently evaluated by the Head of Sustainability and the Business Development Director of Kepak Meats in order to yield answers which would help to address the strategic environmental legitimacy challenges facing the industry as per the objective of this research project. Four initial questions examined consumer behavior and included reduction in meat consumption, factors affecting meat intake, influential reference groups and elasticity of demand. Seven questions examined environmental legitimacy based on items included in the works of Bortree (2009) and Chung et al (2016) and were measured on Linkert-type scales. The questionnaire concluded with four attitude related questions which explored items such as meat alternatives and Ireland's environmental position compared to other European countries. All questions can be found in Appendix 1. After excluding 32 questionnaires that were incomplete, the final sample consisted of 302 Irish consumers. This represented a completion rate of 90.42%.

3.2 Data Analysis

The data was analyzed using SPSS Statistics 26. In order to measure the internal reliability of the seven measures related to environmental legitimacy, Cronbach's alpha was calculated which gave a score of 0.695, pointing to an acceptable level of internal consistency. A cluster analysis then classified consumers into groups according to their meat intake: meat-eater, flexitarian and vegetarian/vegan. The clusters were developed using the Two-Step method given that the number of clusters was pre-selected, the data contained scale and ordinal data and the sample was greater than 200 (Trpkova & Tevdovski, 2009). Log-likelihood distance measure was used since data was specified using dietary group as the categorical variable and standardized with 7 continuous variables. Due to the imbalanced representation of gender and certain age groups in the sample, these variables are referred to in the results but are not significant enough to act as a strong representation of the common socio-demographic characteristics of each cluster. The three hypotheses are first discussed in relation to the research question. The clusters are then analyzed in further detail to reveal further insights regarding legitimacy, consumer behavior and attitudes.

4. Results

The majority of participants were members of Generation Y, aged between 23-38 (60.5%) with 68.01% female respondents and 31.99% male. 67.59% were urban dwellers, while 32.41% resided in the countryside. The sample had a generally high level of education, with over half of respondents holding either a Bachelor's degree (39.13%) or Master's degree (25.16%).

To test hypothesis 1, regarding consumers' perceptions of current environmental actions, the mean value related to the measure 'Irish companies need to do more to protect the environment' was calculated (μ=4.47). Overall this score fell between *somewhat* and *strongly agree* thereby confirming this hypothesis. Hypothesis 2 examined whether the environmental concerns of consumers and meat companies are aligned. The mean value (μ=2.21) related to the measure 'meat companies are as concerned about the environment as I am', indicated that the majority of consumers disagree, either *somewhat* or *strongly*, therefore, upholding this hypothesis. The final hypothesis looked at the awareness of meat companies' sustainability actions among consumers. Here the mean value (μ=2.56) for the measure 'Irish meat companies communicate clearly with consumers regarding their sustainability initiatives' indicated a closer response to *neither agree nor disagree.* This doubt means that hypothesis 3 is plausible but cannot be fully supported.

The first cluster, Meat-eaters, represented 71.2% of the sample, Flexitarians accounted for 20.5% while vegetarians and vegans in cluster 3 totaled 8.3%. The distribution of observations in the clusters can be regarded as satisfactory since they are in line with the findings of the Bord Bia Dietary Lifestyles Report from 2018 which found that 8.6% of the Irish population are Vegetarian or Vegan, 10.6% classify themselves as Re-Balancers (another term for Flexitarians) and 80.8% are non-subscribers to a plant-based diet (meat-eaters). The causes of the increase in the percentage of flexitarians and resulting decrease in meat-eaters is reviewed in the Discussion section. In the following tables the mean values of each cluster are presented and further examined separately in the subsequent sections.

Table 1: *Results of Cluster Analysis with sample sizes and mean values for legitimacy measures*

Variables	**Meat-eaters**	**Flexitarians**	**Vegetarians/ Vegans**
Number of cluster members (n)	215	62	25
I have a positive opinion of Irish meat companies.[1]	3.74	3.77	2.20
How do you rank your understanding of sustainability?[2]	2.82	2.98	3.28
Irish meat companies act responsibly towards the environment. [1]	3.23	2.85	1.84
Irish meat companies need to do more to protect the environment. [1]	4.06	4.40	4.96
Irish meat companies are as concerned as about the environment as I am. [1]	2.78	2.27	1.60
Irish meat companies should develop more environmentally friendly products such as plant-based alternatives. [1]	3.36	4.13	4.44
Irish meat companies communicate clearly with consumers regarding their sustainability initiatives. [1]	2.71	2.66	2.32

[1] Scale from 1= Strongly disagree to 5= Strongly agree

[2] Scale from 1= Not knowledgeable to 5= Expert knowledge

Table 2: *Results of Cluster Analysis with mean values for behavior and attitude measures*

Variables	**Meat-eaters**	**Flexitarians**	**Vegetarians/ Vegans**
Most significant factors reducing meat intake in the past 12 months.[1]	1. Increased awareness of environmental issues = 1.31 2. Increased media coverage = 1.20 3. Increased concern for animal welfare = 1.18	1. Increased awareness of environmental issues = 1.84 2. More vegetarian/vegan friends = 1.62 3. Increased concern for animal welfare = 1.62	N/A
Most significant influences on meat consumption.[2]	1. Healthcare professionals = 2.84 2. Retail offers & initiatives = 2.78	1. Healthcare professionals = 3.28 2. Environmental experts = 3.16	1. Environmental experts = 3.64 2. Healthcare professionals = 3.00

	3. Family & friends = 2.54	3. Family & friends = 3.05	3. Family & friends = 2.28
In the past year I have reduced my intake of red meat. [3]	2.27	1.10	N/A
Would your consumption of red meat decrease if there was an environmental tax added to the price of meat? [4]	3.10	3.55	N/A
The environmental performance of Irish meat companies (e.g. greenhouse gas emissions) is weak compared to other European countries. [5]	3.27	3.24	3.64

[1] Scale from 1= No difference in consumption, 2= Reduction, 3= Increase in consumption
[2] Scale from 1= None at all to 5= A great deal
[3] Scale from 1= Yes to 3= No
[4] Scale from 1= Definitely not to 5= Definitely yes
[5] Scale from 1= Strongly disagree to 5= Strongly agree

4.1 Meat-Eaters

With 215 participants, Meat-Eaters represented the largest cluster accounting for 71.2% of the sample. The various age groups and both genders are well represented in this cluster. There are also similar numbers of this type of consumer living in urban and rural areas. This cluster had a fairly positive opinion of Irish meat companies (μ=3.74). They rated their own knowledge of sustainability comparatively low (μ=2.82). Although this consumer group was the most approving of the environmental work being carried by meat companies (μ=3.23) they believe that there is still room for improvement (μ=4.06). This opinion was further noted in the mismatch between the general environmental concerns held by these consumers (μ=2.78) and those of meat companies. However these participants fall below the general sample mean when it comes to the belief that Irish meat companies should diversify and develop plant-based alternatives (μ=3.36). Meat-eaters regarded the communication between companies and the consumer most positively of the three dietary groups (μ=2.71). The biggest motive for a reduced meat intake in this cluster is increased environmental awareness (μ=1.31) though this is less pronounced. The most significant influence on meat consumption are healthcare professionals (μ=2.84), followed by retail offers (μ=2.78). For meat-eaters it is interesting to look at the elasticity of their demand. When asked if their "consumption would decrease if an environmental (carbon) tax was added to the price of meat" most meat-eaters were unsure and 'might or might not' consider reducing their intake (μ=3.10). Meat-eaters were also unsure of how Irish meat companies' environmental performance compares to that of other European firms (μ=3.27).

4.2 Flexitarians

Flexitarians were the second largest cluster, making up 20.5% of the participants. This cluster was characterised by a much higher representation of females. Meat reducers also tended to be younger, belonging either to Gen Y (23-88) or Gen Z (18-22), and were most often urban dwellers. These consumers had the most positive opinion of Irish meat companies (μ=3.77). Flexitarians rated their understanding of sustainability slightly higher (μ=2.98) than meat-eaters and were significantly less approving of the current environmental initiatives of meat companies (μ=2.85). This is highlighted by their opinion that meat companies should do more to improve their carbon footprint (μ=4.40) and the misalignment between their own environmental concerns (μ=2.27) and those of the industry. Flexitarians were much more open to the idea of Irish meat companies developing new alternatives (μ=4.13) than regular meat-eaters. They considered the communication of the sustainability initiatives of these firms to be less effective than meat-eaters (μ=2.66). Flexitarians have reduced their intake during the past 12 months (μ=1.10) with increased environmental awareness being the biggest motive affecting their consumption behaviour (μ=1.84) which is influenced predominantly by healthcare professionals experts (μ=3.28), followed closely by environmental experts (μ=3.16). Flexitarians demand was much more elastic as most of these consumers would *probably* reduce their intake if a carbon tax was to be added to the price of meat (μ=3.55). When comparing Irish performance to other European firms, these consumers were also unsure of where the industry stands (μ=3.24).

4.3 Vegetarians/Vegans

Non meat-eaters made up the smallest cluster within the sample population at 8.3%. This cluster had the highest discrepancy in terms of gender, with a much higher representation of females. Non meat-eaters also had the youngest age profile, comprising solely of Gen Y and Z participants that live almost exclusively in urban areas. They had a much more negative opinion of Irish meat companies (μ=2.20) compared to meat-eating consumers. They considered themselves to be very informed about sustainability and ranked their understanding as the highest of all participants (μ=3.28). Given their increased awareness, these consumers were much more critical of the environmental actions of the industry (μ=1.84). They believed that meat companies still have a lot of work to do in this regard (μ=4.96) which explains why they considered these firms to be significantly less concerned with the environmental challenges than they are (μ=1.60). Given the lack of meat in their diet and their regular intake of alternatives they were relatively the most supportive of Irish meat companies diversifying to develop meat substitutes (μ=4.44). Vegetarians and vegans were the most sceptical of the clarity of communication coming from meat companies regarding their sustainability initiatives (μ=2.32). There was no significant motivating factor for non-meat eaters reducing their intake since their intake is already nil. The biggest influence on their choice of consumption were environmental experts (μ=3.64) followed by healthcare professionals (μ=3.00). Vegetarians and vegans, unlike other meat-eating consumers, had the most defined notion of the Irish meat industry's comparative environmental performance (μ=3.64).

5. Discussion

The findings of this study indicate that Irish meat companies enjoy, at the moment, a high overall level of organizational legitimacy. Among both meat-eaters and non-meat-eaters, the industry is viewed positively, and its products are strongly considered to be of a high quality. This could possibly be attributed to the special status of meat in Irish society and the strong connection of farming with the Irish way of life. While this is encouraging feedback from consumers, the environmental actions of these companies are viewed in a much more negative light. The three hypotheses which were developed to support the research question, addressing the potential existence of an environmental legitimacy gap, indicate that a gap does indeed exist. Across each dietary group, meat companies are faced with falling social acceptance and growing disapproval regarding their carbon footprint and sustainability initiatives. The actions taken thus far are deemed inadequate by the majority of the sample who expect greater efforts more in line with other EU countries' meat industries. Furthermore, it is interesting to see that 'increased awareness of environmental issues' is the chief motive for a reduction in consumption, which supports the growing importance of this topic for the consumer and therefore represents a top priority for meat companies to address. The previously outlined developments that took place in 2019 and disrupted the industry seem to have had a substantial effect on the Irish population. This is in line with the premise of the legitimacy theory which posits that legitimacy is not static and is forever at the mercy of fluctuating societal expectations. Therefore, while it can be said that organizational legitimacy remains intact for the time being, these results are a strong indication that a gap exists between the perceptions and expectations of consumers when it comes to the environmental performance and integrity of these companies. While this threat has yet to spill over to negatively affect business operations and overall legitimacy, these findings are indeed worrying signs of a growing threat. This is especially true given that organizations are increasingly being viewed and judged by consumers from social and environmental perspectives (Panwar et al., 2014).

In view of the important role that communication plays in connecting with consumers and building legitimacy, it is also a cause for concern that the current approach is falling short in this regard. Origin Green eco labels and Bord Bia recommendations rank comparatively low on the list of consumer influences and are at a similar level to the media and role models like celebrities and athletes. The low influence of the media on the sample population is inconsistent with the findings of other studies which have pointed to the media having a strong effect on behaviour and attitudes (McCluskey et al., 2016). This could be explained however by the media having more of a subconscious effect than consumers realize. Instead, health professionals, retailers and family and friends are the most important and tangible reference groups. These choices can be explained by health professionals being a natural source of dietary information, the strong butcher-consumer relationship (Hornibrook et al., 2005) and the social nature of food and diet (Macdiarmid et al., 2015). These findings reveal the industry's potential conferring publics, which according to O'Donovan (2002), must be targeted in order to change social opinions and attitudes. Given the nature of these particular groups, retailers are the best potential partner for achieving this objective as it would allow meat companies to target the consumer with information regarding its sustainability initiatives at the point of sale.

Since the current communication tactics regarding sustainability and their reliance on the Origin Green programme are failing to reach the end consumer perhaps the time has come for meat companies to step out of the shadows and establish strong brands that allow them to build real relationships with consumers. Brands help to build consumer's trust and act as an important guarantee of reliability and quality (Kotler et al., 2005). The lack of branded packaging is a missed opportunity and these companies can and must find novel ways to connect with their consumer base and share their sustainability initiatives and achievements.

Although brand-building represents more of a symbolic action it could be an important preliminary step before greater substantive actions are taken to repair environmental legitimacy. As pointed out in the literature review, substantive action has been shown to be the most effective means of effecting positive legitimacy change. Indeed, more frequent and transparent communication campaigns may also be helpful in this regard to increase consumer understanding of what is happening on the ground thereby helping to fill the information deficit. The recent formation (October 2019) of a cross-industry group, Dairy and Meat Facts, is a sign that meat companies are already aware of this new reality and are taking reactionary measures. The group's first campaign focuses on three main pillars one of which is 'the sector's commitment to sustainability.' These measures are characteristic of Suchman's (1995) maintenance legitimation tactic which emphasizes past achievements and continuous efforts.

This study confirms that consumers do not represent one homogenous group and have different behaviors, attitudes and beliefs. The results indicated that there has been a marked reduction in meat consumption within the year due to the steady rise of flexitarianism among Irish consumers. This rapidly growing segment of flexitarians is a serious threat to the industry, particularly since the demand of this consumer group is sensitive to changes in price. Given that in a recent Irish Citizen's Assembly (2018) 89% of members said there should be a tax on the greenhouse gas emissions coming from agriculture, this new reality may not be too far in the future. The year on year growth in flexitarians is good reason to believe that this dietary lifestyle represents a sustained movement rather than a trend or fad (IEG, 2019).

Although the participants in this study were not balanced in terms of gender and age groups (later discussed in limitations), the results are in line with the strong plant-based trends coming from younger generations, which has been found by previous studies (Bord Bia, 2019). Gen Z (18-22) are extremely climate conscious having grown up in a world where global warming and the climate crisis have been omnipresent social issues. Ireland has an ageing population, therefore, if meat companies want to remain relevant, they must stay ahead of the curve and satisfy the needs of these younger consumers. Gender is also an interesting socio-demographic variable as the results show and correspond to other research which states that women tend to be more open to reducing their meat intake than men (Austgulen et al., 2018). This is significant when considering that in the majority of cases women are responsible for taking care of the grocery shopping and cooking in the Irish household, therefore influencing the dietary choices of other family members (Banda, 2019). With this in mind, meat companies should take into account these two variables when developing future legitimation strategies. Finally, location also plays an important role. As per the findings of this study, vegetarians and vegans are most likely to be found in urban areas with frequent meat-eaters residing in more rural areas. This may be because those who live in the countryside are less exposed to new dietary choices and cuisines and are more in touch with nature and farming.

In this vein, the development of new, more environmentally friendly products alongside meat may represent the best course of action for these companies in order to address new market opportunities and bridge the environmental legitimacy gap. This idea of diversification through new product development was well received among flexitarians and non-meat eaters in the questionnaire. Convenience and the lack of choice when it comes to substitutes and alternatives has been pointed out as a significant barrier to adoption of a plant-based diet by numerous studies (Bord Bia, 2018). By helping to solve this problem with new products Irish meat companies can capitalize on diverging market segments, address the growing heterogeneity in consumer demand and most importantly make progress towards improving their carbon footprint in line with consumers expectations. Some global firms have already adjusted their strategy accordingly and are now providing 'a complete basket of goods' (Cargill, 2018). Blended products, a combination of meat and vegetables, may be the most obvious first step into this world given their ability to reduce meat content while maintaining a taste that is difficult to replicate. Indeed, as it has been pointed out by many authors, the meat industry needs to prioritize an innovation and research agenda in order to remain competitive (Troy & Kerry, 2010). Other firms related to the meat industry, such as fast food chains, could provide a model for innovative strategy building having faced their own challenges such as rising obesity rates. In this rapidly changing context, some meat companies are repositioning themselves more broadly as protein companies or meat and complementary firms. The Irish meat industry will have to decide how to identify and present itself in this new reality.

6. Conclusion

The purpose of this work project was to examine the environmental legitimacy of Irish meat companies from the perspective of the consumer in order to ascertain whether a legitimacy gap exists. The data collected in this study has identified that there appears to be a considerable divergence between consumer's expectations and current environmental performance. The Irish meat industry is therefore at a crucial crossroads and must make strategically sound decisions to satisfy consumers. While the results indicate that overall legitimacy remains in good condition, increased social awareness of environmental issues has been a primary motive for consumers to actively reduce their meat intake. This is supported by the fact that consumers perceive the environmental performance of these firms to be inadequate. There is a growing group of flexitarians, who now represent a significant portion of the Irish population, demonstrating that even within a predominantly agricultural country there is a sustained and steady trend towards more conscious meat consumption. This phenomenon is naturally more pronounced in certain socio-demographic groups such as younger generations, females and urban dwellers with a university degree. Thus, this research paper finds that there is indeed an environmental legitimacy gap facing the Irish meat industry. Consumers are expecting organizations to become greener and change the way they conduct their business (Bortree, 2009). Therefore, this study concludes with some recommendations and possible courses of action that could help to shape meat companies' legitimation strategies. These strategies will be important for these firms to maintain the meat-eating base and stem the flow of flexitarians to vegetarian or vegan diets.

6.1 Limitations and future studies

The findings of this study are limited by the sample size of the population which participated. Although the researcher tried to ensure a balanced socio-demographic representation this was not possible in the context of a Masters' thesis and must therefore be considered as a limitation in the interpretation and generalizability of the results. A more equal sample representation across gender, age groups and education levels would have allowed for more robust data and provided further insights into consumer perceptions and expectations. Furthermore, the measurement of environmental legitimacy by quantitative research of consumers is a new approach and therefore this thesis represents a preliminary step in refining this methodology further.

The scope of this work project focused solely on the perspective of one of the stakeholder groups; the consumer. Future studies could build a more holistic view of the environmental legitimacy challenges facing the industry by including other stakeholders which belong to the sector. This is extremely important since the long-term success of achieving environmental legitimacy is not only achieved by determining and meeting consumers expectations but also by the acceptance of all stakeholders and their willingness to participate. Since this research was quantitative it could be also complemented by an explorative, qualitative study, perhaps through the use of a focus group to further explore these perceptions and expectations and foster a more in-depth understanding of the current situation. Moreover, since 90% of Irish meat is exported, it would be interesting to conduct a similar study of consumers in key markets abroad in order to assess whether these challenges also exist there.

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8. Appendix

8.1: Questionnaire

Introduction

You are invited to participate in this survey aimed at 'understanding the attitudes, behaviour and perceptions of Irish consumers towards the Irish meat industry.'

This is a study conducted by Serina Fogarty for use in her Master's Thesis at NOVA School of Business and Economics, Lisbon, Portugal.

Your responses will remain anonymous and will solely be used for academic and research purposes. No identifying information, such as your name, email address, or IP address, will be collected. All information gathered will be treated anonymously.

Your participation in this study is voluntary and you can withdraw from it anytime you wish to do so.

Your support and contribution are very much appreciated. This study has 20 questions and an estimate of 6 minutes is required to complete the questionnaire.

For further enquiries, please contact: serinafogarty@gmail.com.

Q1: Gender:
- Male
- Female
- Prefer not to say

Q2: Age Group:
- 18-22
- 23-38
- 39-54
- 55-73
- 73+

Q3: Residence:
- Urban
- Rural

Q4 - What is the highest level of education you have completed?
- Primary education
- Secondary education
- Vocational training
- Bachelor's Degree
- Professional Exams e.g. FE1s, ACA
- Master's or Doctorate Degree

Q5: I am a…

- Meat-eater: “I eat meat almost every day”
- Flexitarian: “I actively reduce meat from my diet but still occasionally eat meat”
- Vegetarian/vegan: “I completely avoid some or all animal-derived products”

Q6: In the past year I have reduced my intake of red meat…

- Yes
- Maybe
- No
- Not applicable (vegetarian/vegan)

Q7: How have the following affected your meat intake in the past 12 months?

	Reduction in consumption	No difference in consumption	Increase in consumption	Not applicable
Change from rural to urban residence	○	○	○	○
More vegetarian/vegan friends	○	○	○	○
Increased awareness of environmental issues	○	○	○	○
Change in health condition	○	○	○	○
Change in price of meat/retail initiatives	○	○	○	○
Increased media coverage	○	○	○	○
Meat safety	○	○	○	○
Increased concern for animal welfare	○	○	○	○
Farmer strikes	○	○	○	○

Q8: How much influence do the following have on your meat consumption?

	A great deal	A lot	A moderate amount	A little	None at all
Family & friends	o	o	o	o	o
Role models e.g. celebrities, athletes	o	o	o	o	o
Bord Bia/governmental recommendations	o	o	o	o	o
Eco labels like Origin Green	o	o	o	o	o
The Media	o	o	o	o	o
Retail offers and initiatives e.g. recipes, discounts	o	o	o	o	o
Environmental experts	o	o	o	o	o
Health professionals	o	o	o	o	o

Q9 - Would your consumption of red meat decrease if there was an environmental (carbon) tax added to the price of meat?

- Definitely yes
- Probably yes
- Might or might not
- Probably not
- Definitely not
- Not applicable (vegetarian/vegan)

Q10: How do you rank your understanding of sustainability?

- Expert knowledge
- High knowledge
- Knowledgeable
- Slightly knowledgeable
- Not knowledgeable

Q11: I have a positive opinion of Irish meat companies.

- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree

Q12: Irish meat companies make high quality meat products.

- Strongly agree
- Somewhat agree

- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree

Q13: The Irish meat companies act responsibly towards the environment.
- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree

Q14: The environmental performance of Irish meat companies (e.g. greenhouse gas emissions) is weak compared to other European countries.
- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree

Q15: Irish meat companies are making adequate progress in changing behaviors that damage the environment.
- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree

Q16: Irish meat companies need to do more to protect the environment.
- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree

Q17: Irish meat companies are as concerned about the environment as I am.
- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree

Q18: Irish meat companies should develop more environmentally friendly products such as plant-based alternatives.
- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree

Q19: Irish meat companies communicate clearly with consumers regarding their sustainability initiatives.

- o Strongly agree
- o Somewhat agree
- o Neither agree nor disagree
- o Somewhat disagree
- o Strongly disagree

Q20: If there were alternatives more readily available, I would buy less meat.

- o Strongly agree
- o Somewhat agree
- o Neither agree nor disagree
- o Somewhat disagree
- o Strongly disagree

8.2: Cronbach's Alpha

Reliability Statistics

Cronbach's Alpha	N of Items
.695	7