Masters Thesis Innovation Sciences (GEO4-2239X)

Accelerating the protein transition: understanding the drivers and barriers which Dutch SME meat incumbents face when transitioning to plant-based proteins.

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Abstract:

Increasing global meat consumption patterns are leading to a surge in greenhouse gasses resulting in global warming. As one of the largest exporters of meat globally, the Netherlands provides a significant contribution to the annual emitted greenhouse gasses. As a result there is increasing pressure on the incumbent meat producers who cause this pollution to find sustainable alternatives. Plant-based protein's provide a solution to this issue as they emit far less emissions and require less energy to be produced. This research looks to understand the way in which these incumbent meat producers undergo organisational change towards plant-based proteins and aims to understand the drivers and barriers they may encounter. This should lead to more effective and structured organisational change thus, speeding up the process by which unsustainable industries, such as the meat industry, become sustainable. Previous research into the field of organisational change has predominantly relied on multinational corporations as the data source for incumbents looking to undergo organisational change. Contrary to this, this research looks at a valuable, yet often overlooked economic power in the Netherlands, the small and medium-sized enterprise incumbent (SME). In order to do so the Dutch SME meat incumbent, 'Bolscher more than meat' is used as a case study for looking at organisational change. This organisational change within 'Bolscher more than meat' is looked at from a theoretical perspective through the lens of Maon et al.'s (2009) organisational change framework which is contextualised by a historical event analysis. The findings show that due to the inherent small size of SMEs they are able to quickly initiate organisational change when led by a motivated management team. However, the small scale of the business also leads to issues with the clear operationalisation of their novel strategy. Due to the inherently small size of SMEs informal communication is likely to be present which presents both disadvantages and advantages for organisational change. Lastly, the Corona pandemic present throughout 2020-2021 has provided difficult conditions for SMEs to thrive. As a result of these findings, this research shows that SMEs require policy support, both through financing and training, in order to help overcome the barriers presented at Bolscher more than meat. As a result, this research provides handholds for SMEs looking to undergo organisational change towards PBP in the future.

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1. Introduction

The consumption and production of meat is a key driver of global climate change in terms of greenhouse gas (GHG) emissions, water and land use, animal welfare issues and human health degradation (van der Weele et al., 2019). The United Nations (UN) expect the world population to grow by 2 billion people in next 30 years, heavily increasing the strain on our planet's resources ('Population', 2020). The combination between population increase and a flourishing middle class is expected to double food demand by 2050 and, in turn, place drastic pressure on global food security ('Population', 2020; Godfray et al., 2010). The rapid development of varying economies, and increasing wealth of consumers, in countries such as China and India, has led to meat demand skyrocketing over the past 50 years (Godfray et al., 2010). This increase in demand places extreme pressures globally on our food production system and has severe consequences for the environment. According to Gilbert (2012) one-third of all global GHG emissions are emitted by the agriculture sector, of which 15% of the global emissions come directly from livestock (FAO, 2013). The UN Food and Agriculture Organisation (2013) further estimate that 10% of the global fresh water supply is used to feed and grow fodder for livestock. This impacts the natural environment as forests need to be cleared to provide space for growing livestock fodder, in turn, generating surplus CO_2 and decreasing local biodiversity (FAO, 2019). Although there is increased awareness of the environmental impact of meat production, global meat consumption is still on the rise.

The detrimental environmental impact of the meat industry, in combination with the predicted population growth, requires the implementation of a sustainable alternative to prevent catastrophic climate change. Novel meat alternatives, such as plant-based proteins (PBP), are considered promising and sustainable solutions to the environmental issues pertaining to meat production. PBP are defined as "products that take the place of meat in the human diet and have an appearance, texture and taste similar to meat products." (Tziva et al., 2020. P 220). Vegetarian and vegan diets have been a custom in many global cultures for thousands of years (Ruby, 2012), however, the mass diffusion of such dietary preferences in Europe, and the Netherlands specifically, is only a recent phenomena (Changing markets foundation, 2018).

Incumbent meat producers play an important role in this transition towards PBP (Harvey, 2020). The agricultural sector has, according to Harvey (2020), received less attention from environmental policy makers, allowing for unsustainable food production to continue to grow: meat consumption is still on the rise in the Netherlands (Banis 2019). So is the Dutch export of meat products, which amounts to €10.4b in annual revenue (Berger, 2016). FAIRR (2019) finds that "77% of major meat, fish and dairy producers do not measure all GHG emissions and do not have meaningful targets to reduce them." (Web). Given that the responsibility of this continued unsustainable development currently sits with the incumbents who produce these unsustainable products any change among these incumbents has the potential to be a significant part

of the solution. It is therefore essential that incumbents make the transition towards more sustainable products.

With a significant economic dependence on meat and the presence of numerous incumbent meat producers, the Netherlands provides a compelling case to understand how an incumbent is undertaking this sustainable transition. As one of the largest meat exporters globally, meeting the daily nutritional needs of 100 million people across 140 countries, the Netherlands is facing a challenge when it comes to making this sector more sustainable (Berger, 2016). While insufficient, incumbent meat producers in the Netherlands have begun taking some action to introduce PBP. As key producers of meat replacements, incumbent meat producers play an important role in this transition towards a more sustainable future. Incumbent companies in the Netherlands are aware of this shift and have gradually been increasing investment into the PBP sector in recent years (FAIRR, 2020).

Previous transition literature has focussed, for the most part, on large-scale incumbent organisation's who are overrepresented in the current body of data (Maon et al. 2009, Saari et al., 2021, Lee & Hess et al., 2019). Thus, this research will, instead, look at how smaller scale incumbents – namely small and medium sized companies (SMEs) – deal with transitioning towards PBP. The reason why focussing on SME incumbents is crucial is because in the Netherlands they provide as much as 70% of the national employment and contribute 60% of the annual Dutch GDP ("MKB Service desk", n.d.). As a result SMEs are among the largest polluters in the Netherlands contributing approximately 65% to the annual industrial pollution (Green, 2016). As the backbone of the Dutch economy it is crucial for SMEs to understand the organisational change processes necessary for an effective transition towards a plant-based future.

This thesis will specifically look at the organisational change processes within one SME incumbent, namely, 'Bolscher, more than meat' (henceforth: Bolscher). Bolscher is a Dutch hospitality and food wholesaler, specialising in meat production and distribution. Their CEO states that he does not see a future in only supplying meat to customers, and expects that within the coming 10 years 25% of his revenue will be plant-based (NOS, 2019). As part of their sustainability strategy, Bolscher is currently working alongside Wageningen University on the creation and implementation of a novel PBP product line. Bolscher is thus an incumbent meat producer who is in the process of transitioning towards PBP. By applying Maon et al.'s (2009) framework to Bolscher, this research will gain a first hand insight into how an incumbent meat producer is manoeuvring through this much needed, complex, strategic change at firm level. This leads to the following research question:

RQ: What barriers and drivers of organisational change does the SME incumbent meat producer, Bolscher more than meat, face during their transition towards PBP?

This research provides a valuable insight into the transition processes deemed necessary for an SME incumbent to transition towards PBP. A better understanding of this PBP transition within SME incumbents offers a viable solution to the inherent environmental impact, animal welfare issues and crippling biodiversity impact resulting from the continued growth of the meat industry. By focussing specifically on SME incumbents this research addresses an often-overlooked gap in the current body of knowledge that narrowly focuses on large companies and adds to the societal understanding of SME incumbents by showing the drivers and barriers they face when transitioning towards PBP. By understanding the specifics of how SME incumbent change this research provides handholds on how to further accelerate the PBP transition and should help similar sized incumbents to change.

This research will answer the research question by looking at the organisational dynamics which enable incumbent meat producers to transition towards PBP. Organisational change is considered the movement away from a current state to pursue a future desired state to enhance the effectiveness of an organisation (Jones, 2013). Specifically, this research will draw upon Maon et al.'s (2009) four-stage framework of sustainable organisational change that provides a clear heuristic by which organisational change can be analysed and operationalised. The framework will be used to study the organisational change processes which incumbents undergo when attempting to change towards novel PBP. The framework provides an in-depth insight into the steps an incumbent meat producer should undergo to create sustainability related organisational change. To place this framework into context a historical event analysis will be conducted to see which factors of organisational change can be attributed to the time period of adoption and which are more uniquely linked with Bolscher.

This thesis will firstly outline the theoretical basis and framework on which this research will be founded. Secondly, it will explain the methodological process that will be followed to acquire and process research data. Thirdly, the analysis section will contain both a historical event analysis of the Dutch PBP market, as well as an analysis of Bolscher's PBP strategy utilising the Maon et al. (2009) framework. Lastly, conclusions regarding the actions of Bolscher and the broader theoretical and societal implications of this research will be discussed.

2. Theory

2.1 Background

Meat is a predominant source of protein and nutrients for many human diets; however, it is also a key driver of global climate change in terms of GHG emissions, water and land use, animal welfare issues and human health degradation (van der Weele et al., 2019). Meat replacements offer an environmentally friendly and economically viable alternative. In recent years there has been an increase in the amount of people adopting a vegetarian or even vegan diet free of animal products (Mance, 2018). The growth of vegetarianism often stems from the increasing awareness of climate change and the positive environmental impact that a global reduction in the consumption of meat can have (Harrabin, 2019). Its growth is further rooted in the increasing concern for animal suffering and welfare (van der Weele et al., 2019).

According to the Dutch Vegetarian Union vegetarianism in the Netherlands has grown by 150% over the past two years with 3.9% of the Dutch population identifying as vegetarian in 2020 ("Vegatrends 2020: forse groei vegetariërs en veganisten", 2020). Furthermore, vegetarianism for many seems like an unattractive proposition as completely removing meat from one's diet is often deemed drastic. As a result, many try to eat meat less frequently considering the improved environmental impact, animal welfare and health benefits this brings. This is commonly referred to as flexitarianism. A study of the Dutch population conducted by the Wageningen University Research centre found an increase of 29% in those who identify as a flexitarian in 2019 (43%) as opposed to 2011 (14%) (Dagevos, 2020). Flexitarians desire to reduce, instead of eliminating their consumption of meat, is considered a key driver of the increasing demand for meat substitutes in the Netherlands (Askew, 2020). Flexitarians are after a product which looks and tastes like meat, however, has less negative impacts on the environment and is generally better for one's health. The increased acceptance and growth of flexitarianism will no doubt see PBP grow in acceptance, consumption, and diffusion throughout the Netherlands in the coming decades.

Growing awareness surrounding the environmental, animal welfare and health concerns of the meat industry is driving the uptake in PBP's. A meat-based diet is shown to require more energy, land and water resources compared to that of a plant-based diet (Pimentel, 2003). Producing 1 kg of animal protein, compared to 1 kg of PBP, is estimated to require 100 times the amount of water resources (Pimentel, 2003). Livestock does not directly consume all this water, with a mere 1.3% of the total water consumption being directly consumed by livestock (Pimentel, 2003). Rather, most of the water is used to grow the fodder and grain used to feed livestock, which in turn, dramatically increases the total water consumption per unit of livestock. Next to this, industrial farming requires an abundance of space to raise livestock and grow their required grain and fodder (Milman, 2018). The vast amount of space required to raise livestock does not measure up to the relative human dietary benefits, with only 18% of our calorific and 33% of our protein intake being attributed to livestock which occupy the majority of farmland (Milman, 2018). Furthermore,

meat production is the single largest contributor to global methane output (Godfray et al., 2018). Methane is a gas which traps heat in the earth's atmosphere contributing to global warming, which contributes to climate change (Godfray et al., 2018). Lastly, a meat heavy diet is indicated to have harmful health affects (Varian, 2019). PBP, on the other hand, provide a clear solution to these issues as they are a source of protein with less environmental, health and animal welfare related issues. This is due to their plant-based nature, which, although not being completely carbon neutral, avoids many of the key problems pertaining to the meat industry. Although PBP provide a clear solution to the detrimental impact of the meat industry, the global market for meat is still growing.

The meat industry is showing signs of stagnation in Europe, however, internationally it is booming. The Netherlands exports the majority of their locally produced meat, to international markets. A report conducted by the Dutch meat sector shows that whilst exports within Europe are slowing down, demand outside of Europe is on the rise with approximately 1.1% export growth expected per annum (Berger, 2016). This growth is mostly attributed to upcoming markets such as China and India who have a flourishing middle class. The new middle classes in the Middle East and Asia now have access to meat markets due to their increased wealth (Nigalu & Seeley, 2015). The predicted continued growth of the meat industry puts meat producing incumbents at a crossroad in which a decision needs to be made regarding the continued investment into their current incumbent product (meat) or to develop newer sustainable alternatives (PBP). Growing pressure from governments, NGO's, scientists and activists aids the shift towards more sustainable meat alternatives (Tziva et al., 2020). Thus, it is evident that incumbent meat producers play a vital role in the transition towards PBP and that the drivers and barriers of this transition need to be understood.

Previous incumbent transition literature shows an over representation of large multinational corporations (MNCs) used as the incumbent data source. This is evident in the use of predominantly MNCs as case studies throughout the transition literature (Maon et al. 2009, Saari et al., 2021, Lee & Hess et al., 2019). SMEs, however, are the backbone to the Dutch economy contributing 60% of the annual Dutch GDP and are often overlooked in transitions literature. Due to the scale of SMEs in the Netherlands they are also considerable polluters and account for approximately 64% of all Dutch pollution (Green, 2016). Van der Meulen and Berkhout (2020) find that agro food industries, of which 70% are family owned (including Bolscher), contribute 7% of the annual Dutch GDP. With the majority of agrarian businesses being family-owned SMEs it is important to understand how they can best undergo organisational change. It is for this reason that this research will focus on an often overlooked, yet crucial part of the economy, the incumbent SME.

SMEs are structurally different from MNCs (Masroor & Asim, 2019). The smaller scale of SME incumbents requires catered government policy as the way in which they transition differs from MNCs

(Masroor & Asim, 2019). This is because multinational incumbents, relative to SME incumbents, benefit from several advantages due to their larger scale including "the hiring of proficient personnel and human resource, usage of better-quality raw materials, opportunity to offer and design new and innovative high-quality products, better liquidity, access to capital and proper allocation of funds." (Masroor & Asim, 2019, P. 636). The OECD find that government support is paramount for aiding SMEs with their 'green' transition as:

> "Greening does have the potential to improve SME business performance, which in turn can generate jobs and income opportunities (Koirala, 2018). However, greening can also impose burdens and costs on SMEs, which could have the inverse effect. The critical role of policy frameworks – whether access to finance or skill development - is to foster these synergies and reduce the burdens." (Koirala, 2018, P. 34).

As a key driver of the Dutch economy and considerable contributor to the Dutch annual gross meat production, agrarian incumbent SMEs require catered policy to aid their transition more effectively to novel green products such as PBP ("MKB Service desk", n.d.; Van der Meulen & Berkhout, 2020).

Current literature often neglects the ability for incumbents to change and, instead, often overvalues the power of new entrants to challenge the dominant status quo (Bergek et al., 2013; Apajalahti et al., 2015; Geels, 2014; Smith, 2007). On the contrary, there is increasing evidence for the advantages incumbents can gain from proactively transforming their organisation to maintain market position (Jiang, 2011). Lozano (2012) looks at the increasing awareness within incumbents of Corporate Sustainability (CS) and finds that those who proactively plan and account for change toward sustainability experience the least resistance to its implementation within the organisation. Lozano (2012) finds that:

> "For CS-oriented changes to occur and succeed with an organisation, the CS drivers (internal, such as leadership, and external, such as regulation) need to be recognised and acknowledged. These provide leverage to temporarily break from the status quo to a more sustainability-oriented state." (Lozano, 2012, P. 62).

Such processes are undoubtedly faced with several barriers which can be overcome by identifying and acknowledging their existence and catering internal strategy to overcome them as opposed to a reliance on ad hoc measures and serendipity (Cyert & March, 1963; Lozano, 2012). Thus, for Bolscher to not lose any market share within the ongoing transition towards PBP, it needs to be proactive with regard to change and address barriers which may arise (Hill & Rothaermel, 2003). By focussing at the firm level on the 'green' transition Bolscher is undergoing, this research explores an often overlooked and under researched aspect of transition studies.

2.2 Organisational Change

To identify and explore the factors which enable and constrain organisational change within SME incumbents the four-stage framework proposed by Maon et al. (2009) will be applied. This paper defines

incumbents as organisation's that within a given regime "have vested interests in maintaining the status quo rather than enabling transitions and will often act to strategically protect their privileged position." (Johnstone et al., 2017, P. 152). It is crucial to understand how incumbents can most efficiently undergo change as they are increasingly being recognised as important vessels for accelerating sustainable change (Ampre et al., 2021). The Maon et al. (2009) framework provides a clearly structured methodology for addressing this organisational change within incumbent SMEs.

With the ongoing shift towards more sustainable PBP, incumbents need to eventually undergo organisational change to remain competitive (Teece et al., 2014). Literature shows that incumbents often are unable to adopt novel technologies due to a wide array of reasons, such as:

> "Lack of knowledge, skills and competencies required to adopt new technologies, commitments to existing technology, the tendency to build on the past success, rigidity due to core capabilities, managerial attention, the lack of incentives to invest on new uncertain technology and underperforming characteristics of new innovations compared to the performance of existing technology in the markets." (Apajalahti et al., 2015, P. 4).

However, these reasons approach the phenomena of transitioning rather statically and neglect the importance of organisational change as a strategy for overcoming the above-mentioned issues (Apajalahti et al., 2015).

Successfully managing organisational change is necessary for SME incumbents to survive adversity (Leucke, 2003). Once a dominant industry regime, such as the production of solely meat, starts to change, not adhering to regime level changes creates a risk of incumbent losing their competitive advantage or even potentially redundancy (Hayes, 2018). Studying the process of organisational change within incumbent companies is important for understanding factors such as the impact of technological advances, increasing competitive pressures and the development of new opportunities and threats which organisation's need to address in order to survive and prosper (Hayes, 2018). This research will provide crucial information for SME incumbents attempting to undergo organisational change by highlighting the potential barriers and drivers inhibiting or accelerating 'green' organisational change within Bolscher. This should lead to more effective and structured organisational change thus, speeding up the process by which unsustainable industries, such as the meat industry, become sustainable.

The integrative framework, proposed by Maon et al. (2009), is developed specifically to analyse organisational change processes within one company. The framework used by Maon et al. (2009) was originally created to show the route incumbent MNCs, such as IKEA, Philips or Unilever, would undergo to implement 'green' organisational change. This thesis utilises the same stages and steps suggested by Maon et al. (2009) and instead applies these to an incumbent SME active in the meat industry to understand the drivers and barriers they may face when undergoing organisational change towards PBP. The Maon et

al. (2009) framework is focused on organisational change from a sustainability perspective and presents four stages an organisation undergoes to achieve sustainable business practices. Maon et al. (2009) focus on how an organisation can go about implementing corporate sustainable responsibility policy. The main aim of their framework is, however, to show the steps an incumbent undergoes to implement environmental related change within their organisation. Environmental related transition policies, such as the implementation and shift towards PBP, can be classified as a form of environmental related change, making the Maon et al. (2009) framework applicable for this research. The framework is based on both novel and classical literature as it incorporates, based on literature review, novel organisational change research and frameworks in combination with one of the most used and cited organisational change frameworks, the three-stage model of organisational change proposed by Lewin (1951). The framework is thus deeply rooted in relevant literature on organisational change and provides a combination of the fields relevant differing insights. The framework comprises four stages: *sensitising*, *unfreezing, moving, and refreezing*. Within these stages there are nine steps (see Figure 1). Each step within these stages outlines indicators for success (see Table 1).

2.2.1 Sensitising

The first stage, sensitising, is focused how the management within the incumbent SME garner awareness regarding the need for organisational change. It is referred to as 'sensitising' as this stage looks at how the incumbent first encounters the preferred environmental strategy.

Step 1: Raising awareness inside the organisation

According to Maon et al. (2009), there are four areas in which awareness can be raised within an organisation: economic, social, political, and individual. The first three of these drivers are market-based as they are initiated as a response to a risk associated with the societal impact of a particular business practice (ie. adjustment of social norms towards vegetarianism). Individual drivers, on the other hand, are value-based and highlight the role of management in dictating the direction of the organisation's change. Thus, in the first step of the framework, Maon et al. (2009) look at how awareness was raised and whether this was done top-down (awareness of management which trickles down to the employees) or bottom-up (employee awareness of need for sustainable change generating pressure on management).

2.2.2 Unfreezing

The second stage, unfreezing, looks at whether the organisation's managers are willing to shy away from their previous practices which may have been enforcing unwanted norms. This requires "uncovering long-held, unchallenged, cultural assumptions about the 'right way to do things'." (Maon et al., 2009, P.76). The process of unfreezing is often faced with internal resistance as a change in the status quo can lead to a shift away from what some perceive as an organisation's core values (Maon et al., 2009).

Step 2: Assessing corporate purpose in a societal context

The second step refers to the corporate norms and values and the identification issues of stakeholders in a company's environment. An organisation's sustainability policy must align with its values and mission, and it needs to be understood how these relate to their core business practices. An organisation must then align its PBP policy goals with its norms and values so that taking sustainability into account becomes natural for employees. Besides the norms and values of the organisation itself, Maon et al. (2009) note that it is also important to clearly identify an organisation's stakeholders. This is key to avoiding conflicting values, objectives, expectations and demands. In order to operationalise step 2 it is important to see whether the incumbent has 1. identified relevant stakeholders, and; 2. identified its current norms and values of the firm.

Step 3: Establishing a vision and a working definition of sustainability

According to Maon et al. (2009), once the internal norms, values and stakeholders are clear an organisation can create a working definition of sustainability. Clearly defining what sustainability means for the organisation creates transparency among all involved stakeholders and employees. An element of the working definition of sustainability is the need to establish a vision for the direction the incumbent wants to go, in relation to PBP. This step can be operationalised by seeing whether a working definition of sustainability has been created and communicated with all relevant stakeholders.

Step 4: Assessing current status

Throughout the fourth step Maon et al. (2009) propose that an audit of all the current sustainability practices is done to provide an understanding of the progress the organisation has made with regard to achieving its sustainability goals. Next to auditing, Maon et al (2009) find that by benchmarking relative to competitors an organisation can understand the barriers and drivers leading to their competitive advantage. Thus, the presence of auditing and benchmarking needs to be explored within Bolscher.

Step 5: Developing a PBP-integrated strategy

Next, Maon et al. (2009) suggest that by translating the values and vision into measurable commitments and expectations an organisation can develop a PBP–integrated strategy. Step 5 is operationalised by turning the organisation' strategy into practical targets and performance measures. According to Maon et al. (2009) often the presence of a dedicated team is a good indication for apt implementation of the new strategy.

2.2.3 Move

In the third stage Maon et al. (2009) find that an organisation's middle management are responsible for the implementation of the newly developed sustainability policy.

Step 6: Implementing the PBP-integrated strategic plan

Maon et al. (2009) show that although top-level management decides the sustainability policies, it is the middle management and other employees which will have to implement it. It is thus crucial to maintain good communication between all levels of the company as employees can be very helpful in the implementation of a new policy (advocates and sources of new ideas) as well as detrimental to the process if not properly engaged. Maon et al. (2009) find that the presence of trainings and progress reports are an effective to measure of the implementation of the PBP policy.

Step 7: Communication about PBP policy commitments and performance
Maon et al. (2009) emphasize the importance of communication both within and outside the organisation to raise awareness. During the move stage this should comprise of mostly internal communication informing employees about their progress. During the refreezing stage communication needs to also be directed externally through media publications which inform about the success of the organisation's PBP program. This step is operationalised by looking at whether Bolscher possesses an internal and external communication plan.

Step 8: Evaluating PBP-integrated strategies and communication
Besides communication and implementation, Maon et al. (2009) argue that evaluating the PBP-integrated strategies is key to ensuring the efficacy of the newly implemented policy. It is important for Bolscher to understand what is working well and to acknowledge what is not. By seeing if Bolscher has regular evaluations, and if so, what they have changed, it is possible to see whether this step is being completed.

2.2.4 Refreeze

Throughout the final refreezing stage Maon et al. (2009) argue that an incumbent organisation should anchor changes in their organisational systems, as well as corporate cultural values.

Step 9: Institutionalising PBP
In the final step it is important to see whether the firm has committed adequate resources to the implementation of their new strategy. According to Maon et al. (2009) the presence of some sort of reward or penalty based on achievement is an indicator that an organisation is attempting to institutionalise its new policy.

By analysing the extent to which Bolscher performs each one of these 9 steps it is possible to analyse the degree to which organisational change processes towards sustainability are present. You may find that at Bolscher certain steps were not followed within this framework which may act as barrier to change. Each step and its relevant operationalised indicators can be found in Table 1.

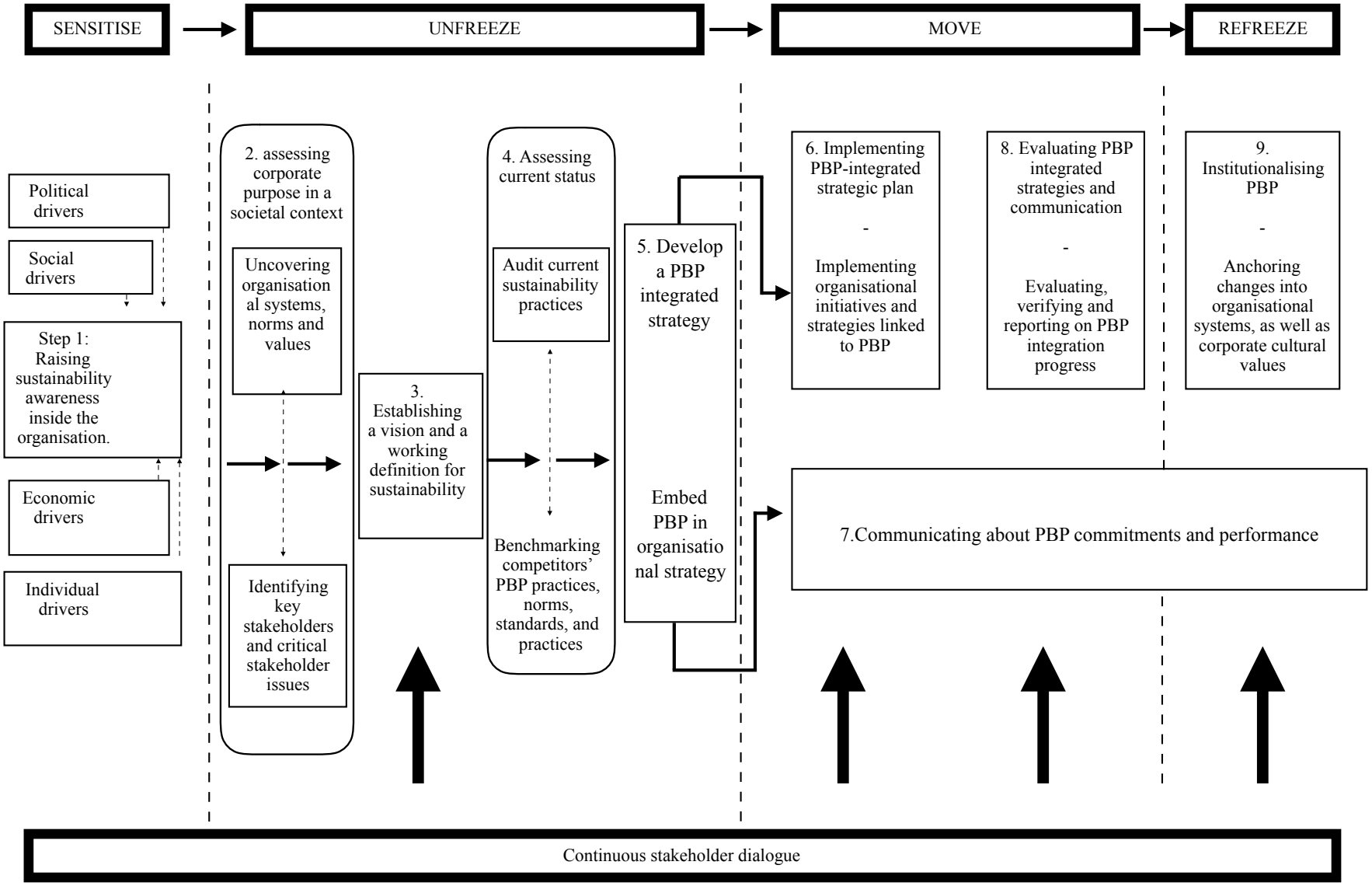

Figure 1. Integrative framework for designing and implementing sustainability policy (Maon et al., 2009) applied to PBP strategy

3. Methodology

This research has utilised a qualitative approach to look at the barriers and drivers of organisational change towards PBP within the Dutch SME incumbent Bolscher by applying Maon et al.'s (2009) four-step framework. Cohen (2011) argues that the ontological focus of quantitative research limits its ability to account for nuances in opinions and regards human behaviour as an object that can be controlled. Qualitative research, on the other hand, is better suited to more open-ended research enabling the in-depth exploration of concepts which are somewhat ill-defined (Maon et al. 2009). Therefore, a qualitative approach has been adopted utilising three sources of data: 1. Semi-structured interviews with key people within Bolscher; 2. Bolscher document analysis; 3. Event history analysis of grey literature relating to the industry as a whole. The first two sources of data are used as these were also utilised by Maon et al. (2009) to demonstrate their framework. Aside from this a third data source, historical event analysis, is added to supplement the interviewee data and provide context regarding the development of PBP in the Netherlands. Furthermore, due to this research's exploratory nature it is considered both inductive and deductive.

3.1 Data Collection

Firstly, data was collected by conducting an analysis of Bolscher's documents such as their company website, press releases and strategic documents. Within these documents key indicators of organisational change, along the lines of Maon et al.'s (2009) framework, as outlined in the indicator column of Table 1, were searched for.

Next to the document analysis, interviews with key people within Bolscher were conducted through open questioning in a semi-structured interview format. In consultation with the CEO of Bolscher, purposive sampling was used to select participants as this allowed for a pre-selected sample of employees that were all guaranteed to be involved with the transition towards PBP (Bryman, 2016). Each interviewee's function within Bolscher is outlined in Appendix 3. Six interviews were conducted between March and June 2021 using Microsoft Teams. The interview questions were based on the operationalisation of Maon et al. (2009) presented in Table 1. The interview guide used is provided in Appendix 1. Maon et al. (2009) also used interviews to assist in the development of rich insights and to improve the generalizability of their research. Semi-structured interviews provide in-depth information from the perspective of the interviewee allowing for unanticipated divers and barriers to emerge (Bryman, 2016). This semi-structured interview format allowed for open-ended questions to be answered and the employees of Bolscher to lead their answers in the direction they deemed fit. The interviews were recorded, with both written and verbal permission from the interviewees, and transcribed shortly after taking place. Each interviewee gave consent to the interview and the use of their data by signing the Informed Consent form (Appendix 2). All interviewee names have been removed from the quotes and they are referred to solely by their job title and the date on which the interview occurred to ensure anonymity. Throughout the communications with each interviewee

transparent clear communication was used to ensure that the aim of the research was clear. By strictly adhering to these guidelines this research voids any ethical concerns which way arise in such a process.

Lastly, grey literature was retrieved from the database Lexis Nexis from the years 1997, the year Bolscher was founded, until 2021. Lexis Nexis is a "database which collects news, legal and business information from thousands of print and online international and national (including Dutch) news sources." (Tziva, 2020, P. 220). Previous studies conducted verify the accuracy of the Lexis Nexis database (Negro and Hekkert, 2008). This data was then imported into NVIVO for the event history analysis. The combination of these three data sources provided enough relevant data to address the research question. It is however limited in that it only looks at data from the Netherlands and thus is solely representative of drivers and barriers pertaining to the Netherlands and not to other countries.

3.2 Data Analysis

Using the grey literature, a systematic event history analysis was conducted reconstructing all the relevant contextual events relating to the growth of meat replacements in the Netherlands to understand how this product has grown on the Dutch market over the past 30 years. Event history analysis is a common form of analysis used in Innovation Studies as it attributes outcomes as results of past events (Hekkert et al. 2007; van de Ven, 1999). By understanding the relevant events which took place in the Netherlands the analysis, using the Maon et al. (2009) framework, is placed in its relevant context. This allows for a better understanding of why Bolscher may or may not have taken the actions they did relative to the period in which these actions were taken. By understanding the context within which Bolscher operates this research can more accurately identify whether drivers or barriers were to be attributed to Bolscher or the period as a whole. This method involves retrieving relevant historical events relating to meat replacements and systematically classifying these as either drivers or barriers. Negro et al. (2007) successfully utilise this method, derived from van de Ven et al. (1999), to form a coherent sequence of events that provides a clear context as to how an industry has changed over time. Obtaining grey literature and conducting an event history analysis is an additional means of gaining extra stable and exact data (Yin, 2003) as it allows for cross-referencing between data sources reducing reporter bias and selectivity (Maon et al., 2009). The search query using search string: atleast1(meat replacement OR meat replacements) OR atleast1(Vleesvervang!) OR atleast1(eiwittransit!) (the Dutch translation of meat replacement and protein transition) was used. This was then filtered for the 'Netherlands', the years 1997 - 2020 and for the removal of duplicates, rendering 264 articles.

The interviews were transcribed verbatim directly after taking place. They were first transcribed into Dutch and any relevant quotes used for the analysis section were then translated into English. Excel was used to code the transcriptions according to the indicators presented in the 9 steps of Maon et al.'s (2009) framework as shown in Table 1. After the interviews were coded according to the indicators grouping took place to iteratively develop sub codes. This allowed for the information from the interviews to be reduced

to assess whether there was any overlap between interviewee answers. It also aided with concretely identifying which drivers and barriers were present throughout the interviewee answers.

	Operationalisation Framework (Maon et al., 2009)		
Stage	**Step**	**Indicators**	**Operationalisation**

Sensitising	1 – Raising awareness inside the organisation	- Awareness about market and value-based drivers: economic, social, political, individual
		- Is awareness being raised top-down or bottom-up.
		- Proactive or reactive change?
			- How is awareness raised about PBP? and / or How was awareness raised about the sustainability implications of meat?
			  - Was it driven by economic, social, political or individual drivers?
			  - Who raised the awareness? Was the process top-down or bottom-up?
			  - Did the changes come from within the organisation of were they a response to outside pressure?

Unfreezing	2 – Assessing corporate purpose in societal context	- Identification of key stakeholders
		- Current corporate culture, norms and values
		- Identification of necessary changes
			- Have you experienced the purpose of your firm change? If so, how?
			  - Were key stakeholders relating to PBP identified prior to implementation of the novel product?
			  - Were the firms current norms and values discussed? And was there an indication of whether the introduction of PBP would clash with those norms and values?
			  - What kind of changes to the firm were deemed necessary to implement PBP?

	3 – Establishing a vision and definition of sustainability	- Creation of working definition of sustainability
		- Transparency among stakeholders regarding definition
		- Development of vision by top management and diffusion through company
			- How was the vision towards PBP created? Was this vision more general regarding sustainability or specifically about the implementation of PBP?
			  - Was a concrete working definition of sustainability created?
			  - How was the definition communicated with relevant stakeholders? Did they agree or provide input the definition?

	4 – Assessing the current status	- Audit of current sustainability status
		- Benchmarking relative to competitor organisation
			- Did you assess the current status in order to see what needed to change?
			  - Was an audit of the current sustainability practices conducted?
			  - Did you benchmark your sustainability practices against your competitors?

	5 – Developing a PBP-integrated strategy	- Translation of vision, values and policy into practical targets, performance measures and guiding principals	- Did you create a strategy with regard to the implementation of PBP?
			  - Was the created vision translated into practical targets and performance measures (strategy)?
			  - Is there a dedicated team for implementing the PBP strategy

Move	6 – Implementing the PBP-integrated strategic plan	- Involvement middle management and employees
		- Resistance to change
		- Trainings and progress reports
			- If a concrete strategy was created, how did you go about implementing this?
			  - To what extent were middle management and the employees involved with the diffusion of the new vision and policies?
			  - Did the firm experience any resistance to the new vision?
			  - Did you conduct any trainings or release any progress reports?

	7 – Maintaining internal and external communication	- Communication of strategic plan (presence of both internal and external communication plan)	- What steps have you undergone to communicate your strategy?
			  - Did you have an internal communication plan?
			  - Did you have an external communication plan?

	8 – Evaluating PBP-integrated strategies and communication	- Evaluation of sustainability practices and strategies
		- Changes as a result of evaluation
		- Identification of barriers
			- Have you evaluated your sustainability / PBP related strategies?
			  - Has the strategy undergone any change as a result of these evaluations?
			  - What are the key barriers that come forth from these evaluations?
			  - What key drivers have aided the success of the PBP strategies?

Refreeze	9 – Institutionalising PBP	- Institutionalisation of new norms and values
		  - Commitment of resources to PBP / sustainability strategy
		  - Establishment of rewards & penalties for achievement
			- Has the firm committed adequate resources to the strategy in order to ensure its continued survival?
			  - Is there a reward / penalty system?

Table 1: Operationalisation of Maon et al. (2009) according to PBP within incumbent SME

4. Results

4.1 The Emergence of PBP in the Netherlands – a historical event analysis

To understand the organisational change within an SME incumbent (Bolscher) in the Netherlands it is important to recognise the context in which this organisational change has taken place. What was found is that there are four periods which informed developments at Bolscher in crucial ways.

Period 1: 1997 – 2005

Throughout the first period PBP saw a rise in popularity among niche environmental groups, however, mass diffusion was not yet present as producers were still focused on improving the texture of the substitute and getting these onto supermarket shelves. The growth of PBP throughout this period was characterised by several drivers; increasing awareness surrounding the long-term environmental impact food is having on the planet and novel policies to address, research and understand this impact, a fear of meat products because of various infectious diseases and finally, the introduction of novel PBP by multinationals into supermarkets. On the other hand, during this period PBP were also subject to heavy regulation across the EU and social stigma as is often the case with niche products challenging the status quo. Incumbent meat producing companies were, at this stage, not focused on the up-and-coming market of PBP. Nearing the end of this period, action started to be undertaken by some major food producing companies in order to experiment with PBP.

To understand period 1 in the Netherlands, it is important to sketch the context in which the PBP market was situated. In 1993 the Dutch government established a Department called the DTO (Duurzame Technologisch Ontwikkeling [Sustainable Technological Development]) within which they experimented with various sustainability innovations. One of the teams within the DTO was the Novel Protein Foods (NPF) who were focused on the interaction between food technology, economic policy, and societal issues (van Kasteren, 2001). The NPF led to the establishment of the research program Protein Foods, Environment, Technology and Society, also known as Profetas, which continued the research of the NPF with a more specific focus on consumer behaviour in relation to PBP (Aiking et al., 2006). The establishment of NPF, which later grew into Profetas, was the beginning of government research into trends surrounding PBP.

In 2001 the Dutch Customer Association, who are concerned with consumer safety including food safety, published a report which outlined the Corporate Social Responsibilities (CSR) of meat producing companies and their unsustainable impact on the world (Kniese, 2001). This institution is widely known and respected throughout the Netherlands and was one of the first to shed light on the responsibilities of

meat producers for their environmental impacts. The aim of their research was to develop accountability and transparency regarding companies CSR practices and thus also to hold companies accountable who were underperforming in across a number of benchmarks. As a result of research conducted by the Customer Association the Wettelijk Openbaarheid Productie en Ketens (WOK [Legal Openness regarding Production and Chains]) was suggested which should "provide consumers with access to correct and complete information, which consumers need to determine their preference for a product or service, based on certain societal social wishes and considerations." (Bertens et al., 2008, P. 4). This would provide consumers complete transparency regarding where their food, including meat, came from. The feasibility of such a policy was researched between 2002-2008 and some elements of the WOK were introduced into government policy and which included the 'vision' of increasing the transparency of communication for consumers.

The previously limited target market of environmentalists quickly grew in the early 2000s due to the various epidemics of mad cow disease and bird flu (Aan de Brugh, 2001). These outbreaks scared consumers in the Netherlands and lead to the demand for alternative sources of protein. Throughout this period the Dutch Vegetarian Association (NVB) quickly prospered "it sounds ironic, but the meat-producing sector is the best promotion for vegetarianism at the moment, says the NVB." (Zalinge, 2003, P. 1). The presence of such diseases created fear among consumers driving a change towards alternate sources of protein.

2005 was a milestone in the Netherlands as it marked the first mass introduction of a meat replacement by a multinational. Campina, the Dutch dairy giant, introduced Valess, a dairy meat replacement made to taste, cook, and feel like real meat. Their target market with this product was the "meat lover who likes variety and the consumer who wants to do without meat every once in a while. We have looked for a product that makes the housewife think: my husband would like that too." (Houtepen, 2005, P. 2). Campina was the first multinational to put meat replacements into Dutch supermarkets, they were able to do so because they had the economies of scale necessary to produce Valess and do so within small supermarket profit margins. Valess was competitively priced, cheaper than both beef or chicken per kilo, removing previous stigmas surrounding meat replacements. In this period market research showed that Valess was an instant success with the spectacular growth of meat replacement sales throughout the Netherlands that year (Thijssen, 2005).

Period 2: 2006-2011

The second period is characterised by the increased awareness among the Dutch government and consumers regarding the potential impact of meat on both animal welfare and the environment. In 2006, a document, the Livestock Long Shadow, was released which would generate a major shift in consumer and government awareness regarding the effects of meat production in the Netherlands. The document was published by the United Nations Food and Agriculture Organisation and explicitly highlighted the effects

of the meat industry on the environment (Steinfeld et al., 2006). Although there was already some awareness regarding the effects of the meat industry on the environment, among Dutch politicians little was known about the concrete implications of the meat industry (Quist, 2007). As the research was done by one of the world's largest intuitions, the United Nations, it was not possible for governments to ignore the findings. This initiated both increased government research into this field and the rise of institutions that would go on to raise awareness about the negative consequences of the meat industry, on the environment.

The resulting discourse surrounding the implications of meat production resulting in a rapid rise in awareness regarding the environmental, health and animal consequences of meat. In 2007, the Party for the Animals was founded, a Dutch political party specifically to represent animal welfare issues. It was also the release year of 'Meat the Truth' a Dutch climate awareness documentary bringing this content to the Dutch public in a more comprehensible form ("NGPF", n.d.). Further, initiatives such as the Vleeswijzer (2007) and Eatgreen (2009) brought attention to the broader public regarding the animal cruelty as well as CO_2 implications of the meat they are eating.

In light of the Livestock Long Shadow report and mounting public pressure and awareness the Dutch government increased research into the effects of meat on the environment and health. The intent of the government is exemplified in the 2009 Memorandum 'sustainable food', from the Ministry of Economic Affairs, which describes its changing vision of making food consumption and production within the Netherlands integrally more sustainable. The memorandum had, as central aim, for the Netherlands to become a leader in the field of food related sustainability within the coming 15 years. Next to this, the Dutch government started funding studies regarding the health consequences of not eating meat (van Gool, 2011). These studies, published in 2011, showed that a diet containing no meat can still provide the necessary nutrients and vitamins for humans to be healthy (Tijhuis et al., 2012). Growing awareness both in public and government spheres saw a push towards creating improved technologies for an alternative source of protein. At this stage, many incumbent food producers were still apprehensive and not yet invested in this market as the vegetarian consumer trends were merely a niche movement.

Alongside government research, private and scientific research firm were also starting to look into alternative technologies for producing plant-based protein. This technology took on various forms with research being conducted into plant-based solutions such as algae, meat cultures, insects and seaweed. In 2009 Wageningen University set up a new project named Ohja, which aimed at creating cheap, scalable PBP's which imitated the texture and flavour of meat far better than any foregoing PBP's ("Ohja", n.d.). The success of this technology was among the reasons that the coming years saw a rapid growth of PBP development and diffusion in the Dutch market.

Period 3: 2010 – 2015

Throughout period 3 the PBP market saw an even bigger increase in consumer awareness and changing consumer preferences, alongside the rapid growth of several new companies looking to launch novel PBP products. This period saw the PBP market exponentially grow in both the assortment of goods and market share. As a result, incumbent meat producers were seeing the niche market grow and early adopters were already starting to take action. This period saw PBP become increasingly trendy as consumer preferences were slowly changing to incorporate less meat into their day-to-day diet.

The growth in this period was driven by the technological advancements made in period 2. The high moisture extrusion technology, developed as part of the Ohja project at Wageningen University, was a new way of making very realistic imitations of meat using just protein and water ("Ohja", n.d.). Ohja managed to develop technologies which up and coming start-ups, such as the Vegetarian Butcher, would go on to use to create PBP's with superior taste and texture. The Vegetarian Butcher, launched on Animal Day 2010, aided the mass diffusion of PBP's in the Netherlands and throughout the world ("The Vegetarian Butcher", n.d.). Their mission revolves around removing the taboo surrounding the bad flavour and texture of PBP's and equates vegetarian products as equals with meat.

The introduction of novel innovators such as The Vegetarian Butcher is part of the reason why the Dutch PBP market doubled annually starting from 2010, making it almost impossible for incumbents to not notice (Wild et al., 2014). With this rapidly growing niche market showing its economic viability companies using Ohja technology started showing the Dutch meat market that PBP products had potential. This was also reflected in the supermarket shelves in which the number of available PBP products was rapidly increasing. This is exemplified by the growth of the Vegetarian Butcher who opened their first shop in 2010 and has been growing by 50% annually with their products in 3000 shops across 15 countries by 2015 (Tzsiva et al., 2020). Next to this, the annual meat consumption in the Netherlands also decreased during this period. Between 2010 and 2015 the annual consumption per person in the Netherlands went from 80kg to 75kg per annum ("Meat consumption", n.d.).

This period also saw PBP producers aligning to effectively address the market incumbent meat producers. The Planet, founded in 2012 by Jeroen Willemse the founder of Ohja, aimed at shifting consumer preferences towards PBP. Their goal was to normalise the use of PBP in consumer lives as meat had been normalised previously. This was achieved through both lobbying and policy intervention as well as actively marketing the newly found 'protein transition' towards consumers. Next to this, in 2014 the Protein Competence Centre (PCC) was founded by Wageningen University with the aim of increasing PBP research through increased collaboration among key stakeholders. This was the first organisation to connect both public knowledge institutes (Wageningen University, Groningen University) and private knowledge institutes (TNO) with companies interested in the growing PBP market ("PCC", n.d.).

During this period the Dutch government did not yet implement policy focusing on fostering PBP as this was still a niche technology. Instead, they were concentrated on incumbents reducing their CO_2 by focussing their attention on the energy transition. In 2012 the Central Organisation for the Meat Sector along with several other representatives of the meat industry in the Netherlands set up the 'roadmap meat'. This roadmap was an "agreement between government, industry and institutions to improve the energy efficiency of products, services and processes and thereby reduce the use of fossil fuels." ("COV", n.d.). This 242-page roadmap focuses purely on fossil fuel reduction and fails to mention how PBP could aid with the reduction of CO_2 output. This is characteristic of this period in the Netherlands in which the food industry was pushed towards electrifying and optimising processes instead of introducing niche novel sustainable technologies such PBP.

Although the meat industry lacked awareness surrounding the up-and-coming PBP sector Dutch supermarkets were among early adopters in the Netherlands. Large supermarket brands such as Jumbo and Albert Heijn were among the first to start introducing a wide assortment of sustainable meat alternatives. 2013 marked the introduction of the 'vegetarian schnitzel' Albert Heijn's first home brand PBP ("Achtergrond: Wereldprimeur voor Albert Heijn", 2013) and 2014 was the first year in which insect burgers became available on the shelves of the Jumbo. This shows an awareness of the changing consumer patterns as incumbent supermarkets are driven by demand and are clearly adapting their supply to match this.

Period 3 was a time of rapid change and the beginning of PBP diffusion into the mass market. Throughout these years awareness was on the rise and so was the availability and growth of PBP's. This was mostly due to the introduction of new start-ups that utilised novel PBP technologies to produce better quality products and introduce these to the market. The combination between the improved PBP's and a growing awareness within the Netherlands of the need for plant-based alternatives provided a launching platform for incumbents to start involving themselves more in the following period.

Period 4: 2016 – 2021

During Period 4 PBP in the Netherlands saw rapid growth and diffusion into the market. Incumbents, who had previously ignored or dismissed this growing niche market, became ready to step in and begin collaborating with and acquiring PBP companies. This marks a change in the uncommitted position previously held by incumbents towards PBP. The rapidly growing PBP market in the Netherlands had shown it was here to stay.

During this period incumbent food producers slowly started experimenting with projects alongside established PBP producers. Starting in 2016 Unilever started a partnership with The Vegetarian Butcher to create a vegetarian version of Unilever's subsidiary Unoxs' meatballs. This was the first time The Vegetarian Butcher had worked in partnership with a large multinational ("Unilever", 2018). The

collaboration between the two parties was a success and Unilever acquired The Vegetarian Butcher in 2018 with the aim of bringing their products to a worldwide audience. This marks a shift in the paradigm within the Dutch market as one of the most popular PBP producers was acquired by one of the world's largest food suppliers.

Throughout this period consumer awareness of PBP was on the rise and eating habits were starting to change on a larger scale. Research showed that the key reason why consumers were less interested in meat is because they are more concerned with their health, animal welfare and the climate (van Dinther, 2019). Community initiatives, such as the National Week Without Meat, were initiated in 2018 and have been recurring ever since ("Week Zonder Vlees", n.d.). Initiatives like this were supported from the start by incumbent supermarkets such as Albert Heijn and Jumbo who used these events to promote and introduce new ranges of PBP. Since the inaugural week in 2018, Albert Heijn has added approximately 50 new vegetarian products to its shelves ("Week Zonder Vlees", n.d.). These changing consumer preferences are reflected in a study conducted by Natuur en Milieu (Dagevos, 2020) which highlights that 43% of the Netherlands identifies as flexitarian.

Whereas throughout period 3 the food industry was focused on carbon neutrality, through the electrification and optimisation of processes, period 4 marked the introduction of government policy directly targeted at encouraging the growth of PBP. In 2018 the Dutch government launched the National Protein Strategy which aimed at fostering PBP creation to contribute to the health of humans, animals and the natural environment ("Biojournal", n.d.). Due to the limited arable land in the Netherlands, the government is deciding to stimulate innovation in the PBP sector. This is done through the implementation of the Mission-driven Multiannual Innovation Programme (MMIP) which aims at funding public and private research regarding various sustainability 'missions'. Next to this, the national protein strategy aims to change consumption patterns of the Dutch population by decreasing the import of meat-based proteins and stimulating the consumption of PBP.

Agreement within the PBP sector grew further during period 4 with the formation of the Green Protein Alliance. The GPA is an offshoot of The Planet and was established in 2017. Its aim is to unify the plant-based sector including both incumbent and smaller firms to reduce meat consumption ("Green Protein Alliance", n.d.). It is a milestone within the Netherlands as it combines many of the country's largest food retailers, knowledge partners and the national government into a unified vision to reduce meat consumption ("Green Protein Alliance", n.d.). After one year of existence, the GPA was able to realise 3.2% growth in the sales of PBP whilst seeing a 1.7% decrease in meat consumption. As many of the largest food incumbents in the Netherlands are part of this alliance, their impact is substantial.

In 2021 the worlds largest meat producer 'JBS' acquired the Dutch meat replacement manufacturer Vivera €341 (van der Eerenbeemt, 2021). As a result of government funding, growing consumer interest and the acquisition of various PBP brands by multinationals novel plant-based technologies have been on the rise in the Netherlands. The Vegetarian Butcher has shown to other entrepreneurs within the Netherlands that there is a lot of economic opportunity in the market of PBP. The growing abundance of varying PBP technologies in this period "provides a lot of opportunities for the larger food companies, which are playing catch-up with the smaller, more nimble-footed counterparts." (Sahoo, 2018, P.1). Novel Dutch start-up Mosa Meat, who led the technological advancement of cultured meat, have also recently seen interest from international partners with Swiss food giant Bell Food group recently acquiring a major stake. Technologies such as cultured meat have only started appearing in this latest period and incumbents are seeing the value that investing early in such products can offer to provide a competitive advantage.

Due to early investment and support from the Dutch government the Netherlands is, in recent years, starting to become a world leader in the field of PBP. Since the late 1990's the Dutch government has encouraged research into the potential of PBP. Knowledge institutes, such as Wageningen, have taken it upon themselves to delve further into this field over the past 20 years. As a result, they have produced ground-breaking technologies which have improved the quality of PBP's as well as made the Netherlands a very attractive hub for many of the worlds largest food technology companies. Dutch media goes as far as comparing the East of the Netherlands (where Wageningen and Bolscher are located) to Silicon Valley, naming it 'Vega(n) Valley' (van der Velden, 2021). Not only are Dutch food technology companies situated in the East of the Netherlands but multinational PBP producers, such as Beyond Meat, have started the production of two factories in this area in 2021. As a result, the founder of The Planet and GPA, has initiated 'The Protein Cluster' which aims at sustainably growing the eastern provinces of the Netherlands into a global PBP cluster aiding with the acceleration of the protein transition both in the Netherlands and worldwide ("TPC", n.d.).

In March of 2020 the Covid-19 pandemic (Corona crisis) swept through Europe sending most countries into a strict lockdown. In the Netherlands this lockdown meant closing all hospitality services and ensuring that people confined themselves to their own homes. Throughout this period incumbent food producers had no choice but to stop production in many factories as the government created a 'home-office' policy. Throughout the pandemic SMEs have received relatively less financial aid than MNCs, which was commented on by some by stating "while large corporations receive billions in state aid, small and medium-sized enterprises get a raw deal at the start of the corona crisis." (Staal & Woutersen, 2020, Web). Another result of the Corona crisis is the increased focus on health. The total impact which the Corona crisis has had on the industry is not yet clear as they are currently still facing challenges due to the pandemic.

4.2 Organisational change towards PBP according to Maon et al. (2009):

The event history analysis has provided the context under which Bolscher has undergone organisational change towards PBP. The following section will address these changes utilising the Maon et al. (2009) framework and where relevant show how the contextual factors outlined in the historical event analysis played a role. This aids in determining whether the changes at Bolscher were typical for the time or unique to their organisation.

4.2.1. Raising awareness

The first step for an incumbent to achieve organisational change, according to Maon et al. (2009), is raising awareness. This step initiates the initial 'sensitising' stage and refers to how awareness has been raised about the need for the implementation of PBP's within an organisation. Maon et al. (2009) argue that awareness within an organisation is often raised through a combination of market (economic, social & political) and individual drivers. Next to this, Maon et al. (2009) also create a distinction between awareness being raised top-down or bottom up. In the case of Bolscher awareness regarding the need to implement PBP first emerged among the senior leadership. They became aware of the potential of PBP through social interactions with friends at informal gatherings and afterwards they spread this idea throughout the organisation in a top-down manner. At Bolscher three of the four drivers; social, individual and economic were present in the conducted interviews, whereas political drivers were scarcely mentioned.

First the social drivers; between 2013-2014 the management of Bolscher first began hearing about PBP through social circles who increasingly began discussing the sustainability implications of the meat industry. This is also reflected in the historical event analysis which shows increasing consumer awareness regarding PBP during this period. It was often in informal settings that these issues would be raised: "at home, whenever you went to a birthday party, there were always negative stories about the agricultural sector and about meat." (Interview CEO, 14 March 2021). Thus, according to the Bolscher management, initial awareness within the organisation, regarding the potential need for change, was raised through social drivers.

Individual drivers for the introduction of PBP among the Bolscher employees were varied and often also absent. When the CEO was 30 he decided he was going to try and "leave the world a better place than he found it." (Interview CEO, 14 March 2021). It was this personal motivation that led him to build a circular energy positive house in 2008 and driving an electric vehicle in 2013. His passion for creating a circular energy home impacted his perspectives on the whole business when in 2015 as he saw "that the protein transition and the energy transition are kind of copies of each other." (Interview CEO, 14 March 2021). And thus because he individually finds this topic important "it automatically permeates into my business." (Interview CEO, 14 March 2021). Nevertheless, other employees within Bolscher stated that they were individually not driven by sustainability and, on the contrary, found it difficult to accept that a meat

producing company was going to start incorporating PBP products. The Production Manager, for example stated “I am a bit old-fashioned. I am an old-fashioned butcher and have a butcher's diploma, so meat is important to me. I just didn't see much point in alternative proteins, especially not plant proteins.” (Interview Production Manager, 12 May 2021). Thus, individually he was against the move within Bolscher to incorporate PBP, however, economically he began to see the opportunity PBP products could provide.

Although these social drivers and individual drivers first raised awareness among management, economic drivers, such as the success of PBP products in the market and diminishing size of the meat market in the Netherlands brought about an economic incentive for change. The history event analysis indicated that purely vegetarian brands, such as the Vegetarian Butcher, could be profitable. Even in the time period (Period 3) when awareness was first being raised within Bolscher. “When I was studying at the butcher's trade school, the Vegetarian Butcher was nothing; they only had two mediocre products. Now they have over 50 in all the supermarkets.” (Interview Production Manager, 12 May 2021). Economic market forces such as the presence of The Vegetarian Butcher led the food industry by example during this period. The history event analysis shows that the growth of vegetarian products, from 2010 onwards, was rapid. The growth in this niche market segment raised awareness among several employees at Bolscher and acted as a catalyst for increased awareness by the leadership.

Next to this there was also an inherent awareness regarding the need to change with the market as “what we do is slowly dying out." (Interview Head of Sales, 2 June 2021). The economic need for butchers to adapt was further reflected in the COO’s statement “What do you do with a butcher's shop in 10 years' time? Not much if you don't incorporate vegetarian products. Thus, we need to broaden our scope and participate in the protein transition.” (Interview COO, 13 March 2021). This combination of seeing the profits made by PBP already on the market and the inherent changing market in the Netherlands led to increased awareness regarding PBP.

The Maon et al. (2009) framework is interested in how awareness is raised within an organisation, as well as, how it is diffused among employees. Within Bolscher awareness was spread to the rest of the company by the leadership, and thus in a top-down manner. By 2015 it was clear to the Bolscher upper management that change was necessary, however, among employees this was not yet the case. As one of the middle managers stated: “the upper management really had the vision to start doing that [sustainability] and the CEO was an early adopter. I didn't really believe in it then.” (Interview Production Employee, 11 May 2021), exemplifying the lack of interest in the transition when it was first introduced. Furthermore, among employees, it was unanimous stated that awareness was raised top-down with the Head of Sales stating “it was really the CEO who raised awareness of the issue of sustainability.” (Interview Head of Sales, 2 June 2021).

Whereas individual, economic and social market forces were apparent in most interviews, there was little to no mention of political drivers raising awareness within Bolscher. This concurs with the history event analysis, which shows that during the period in which awareness was raised within Bolscher (Period 3) meat companies were more focused on the energy transition than the PBP transition. Officially, the Dutch government only implemented an official protein strategy in 2018. The driver which seems most at play is the individual driver of the Bolscher CEO. His individual passion for sustainability is what instigated the sustainable change and became the reason other employees became more aware of the need to transition. This includes his brother, the COO, who attributes PBP awareness within Bolscher to the CEO "my brother was the one who compared the protein transition to the energy transition. And actually, my brother's vision was the catalyst for our new vision." (Interview COO, 13 March 2021). This emphasises that up until the end of Period 3 Bolscher was more focused on the energy transition than the protein transition.

4.2.2 Assessing corporate purpose in a societal context

According to Maon et al. (2009) the second step, for incumbents generating organisational change towards PBP, is assessing their corporate purpose relative to their societal context. This step initiates the second 'unfreeze' stage, in which the changes deemed necessary are identified. This is done by seeing to what extent necessary changes were identified to implement PBP and by looking at the organisation's corporate culture. At Bolscher, the first-time necessary changes for transitioning away from meat were identified, was in 2014 during a sailing trip where the CEO and COO (brothers) had come together to plan the strategy for the coming 5 years. During this trip three necessary changes were identified:

> "1. we will become 'the best boys in the class' by making products of high quality with a focus on CO_2 reduction; 2. we will try to make products that contain less animal protein, such as 'Meat your Veggies'; 3. we will try to control our supply chain from start to finish, from animal to carbonate, so that we can optimise each process. We started all three of these things in 2015." (Interview CEO, 14 March 2021).

Next to identifying necessary changes Maon et al. (2009) find that this step also involves assessing the corporate culture of an organisation. Within Bolscher the corporate culture is referred to as rather black and white with regard to the vision being pushed by top management.

The social context in which Bolscher finds itself in 2014 is one where the government is still mostly emphasising the need for agrarian businesses to transition towards CO_2 neutrality, with a focus on energy efficiency and not yet PBP. This can be found in the Bolscher strategy, which shows carbon neutrality as one of their main goals starting in 2014. However, next to carbon neutrality, Bolscher also is already aware of the growth of PBP products in the Netherlands and thus start experimenting with plant-based products:

> "We started making vegetarian products in 2015. But every time we made something, we didn't really like the taste or texture. We decided that if it didn't taste good, we wouldn't put it on the

> market. And then we looked back at how the car industry did it and they first made hybrid cars so people could get used to them. So we are going to follow that course too, and that is how 'Meat your Veggies' started." (Interview CEO, 14 March 2021).

Thus, starting in 2015 Bolscher began experimenting with PBP and introduced a hybrid PBP called Meat your Veggies (MYV) onto the market. Next to the launch of MYV, strategic documents from 2018 show that Bolscher is aware of their social context. This document acknowledges that "the way we consume meat is not sustainable." (Strategic Document - Bolscher, 2018). And strives to find a "balance between humans, animals and the environment." (Strategic Document - Bolscher, 2018), outlining that PBP are a core part of the company's future vision. The intention to produce alternative PBP products in 2018 corresponds with the history event analysis which shows that the Dutch government was starting to refocus sustainability in the agrarian sector from CO_2 neutrality to, more specifically, the transition towards PBP's.

In order to transition to PBP, Bolscher encouraged motivated employees to step forward regardless of their previous experience. Maon et al. (2009) find that by understanding "corporate values and embedding them in management practices, organisation's may hope to reinforce behaviours that benefit the company and communities inside and outside the firm, and which in turn strengthen the institution's values." (P. 78). The familial nature of Bolscher's corporate culture allows for change to be driven by results and performance, regardless of an employee's experience.

> "The people who work here, their jobs and their pay scales, do not correspond to what they have studied or have done before. If people are enthusiastic and motivated, and want to do well, and make sure the product gets to the right place at the right price. Then it makes very little difference where you come from, what you do or what you look like… We involve people in their twenties and give them the freedom to experiment, which enables us to develop really good products. Normally, at other companies, you only see those rusty food technologists in their forties. They are so engrossed in the details and are not concerned with making a delightful product. And with young enthusiastic people, you get that." (Interview Head of Sales, 2 June 2021).

The Head of Sales thus argues that because of the company culture, which promotes proactivity across all levels, younger employees can get involved, which, has recently led to the creation of new a PBP product - the fully vegetarian shitake burger.

Interviews concur that as a result of Bolscher's current transition towards PBP, there is freedom for motivated employees to take more responsibility if this is what they want. However, the CEO is also quite strict in the organisation's vision towards PBP and does not provide much latitude to those who do not buy into this vision. According to the Head of Sales "the CEO can be quite black and white and come across bit harsh, however, the presence of his brother in the upper management provides a complementary counterweight as he "shows the other, more human, side of the coin. And that's why they are a good team."

(Interview Head of Sales, 2 June 2021). Thus, according to interviews the company culture provides freedom but only to those who align with the direction towards PBP.

Next to understanding an organisation's corporate culture, Maon et al. (2009) find that organisation's need to successfully identify necessary changes in step 2. They identify that during this process stakeholder management is crucial. However, Bolscher, as family run SME, cuts out many of the stakeholder interests as the brothers in the management hold a majority shareholding and have all of the decision-making power. As a result, they do not need to rely on consulting as many stakeholders as Maon et al. (2009) may suggest is necessary. Instead, the CEO highlights that:

> "It is a kind of manipulation to make sure that I can keep doing perusing this change [towards PBP]. I am the boss and can make sure the numbers come out right." (Interview CEO, 14 March 2021).

This shows the power the brothers have in the identification of necessary changes as they are able to as the CEO stated 'manipulate' the rest of the company to move in the direction they deem necessary, a transition towards PBP. It is clear that without the need to compromise with many stakeholders identifying the direction and changes necessary at Bolscher is a much simpler process relative to the dilemma Maon et al. (2009) highlight.

4.2.3 Establishing sustainability vision

The third step towards implementing successful organisational change is establishing a sustainability vision. Maon et al. (2009) highlight the importance of the creation of a working definition of sustainability as it ensures the organisation is working towards the same goal. Is also creates the foundation upon which the sustainability practices, and in this case the PBP strategy at Bolscher, can be assessed in later stages. Next to this it is important for the leader of the change to "create a vision for the future aligned with the demands from the environment; this leader also must communicate the vision in an inspiring, way so that employees act accordingly." (Maon et al., P. 79). Within Bolscher step 2 showed that necessary changes were identified in 2014 and these began to be implemented in 2015. Interviews with the management unanimously provided backing to these claims and strategic documents provided from 2018 further show the integration of this vision.

Within Bolscher one clear working definition of sustainability is not present. Generally, throughout the interviews, it was clear that informal communication, instead of a clear strategy document for example, was the preferred form of communication. As a result of the continual informal communication practices, no concrete definition was created or communicated. According to Maon et al. (2009) this could make the foundation of the desired sustainable organisational change weak as there is no clear reference point for all stakeholders (in Bolscher case its employees) to refer to. Next to this, according to Maon et al. (2009) it makes evaluation of the organisation's change processes difficult at later stages of the change process.

Although a concretely communicated working definition of sustainability seems absent, there is a PBP oriented vision which has been pushed by top management. The vision management with Bolscher are pushing is that Bolscher is going into the future not specifically as a meat producer but a protein producer.

> "Actually, meat consists of protein, and then we are no longer a butcher but a protein factory. With that in mind, you broaden your scope a little bit and it doesn't really matter whether it is animal or vegetable protein. We are a protein factory, and we process proteins into a great product. We are going back to the basics of what we are processing." (Interview COO, 13 March 2021).

A strategic document from 2018 communicates this vision and provides a timeline as to the steps necessary to accommodate the vision. This timeline is rather general and does not provide concrete steps for the integration of PBP. Unfortunately, no earlier documentation clearly communicates this vision, although according to the management it was implemented starting in 2015. This could also be attributed to the informal communication, and in many cases also documentation, practices of Bolscher. From an employee perspective, the vision was clearly communicated from the start "you come to work here and they have a clear story, they tell you who they are and what they do and that story is now revolves a lot around sustainability and the environment." (Interview Production Employee, 12 May 2021).

In accordance with the history event analysis, the fact that the vision only became more concrete in 2018 is logical as it coincides with the implementation of the Dutch National Protein Strategy which also was introduced in 2018. This was clearly a turning point in which industry at large started implementing concrete change as a result of government policy.

4.2.4 Assessing current status

Maon et al.'s (2009) fourth step for an incumbent to achieve successful organisational change is assessing the current sustainability status. Maon et al. (2009) argue that by systematically auditing current company policies, codes of conduct and principles, through consultations with key managers who represent key functions, it is possible to get an insight into an organisation's current practices and standards. They suggest that by benchmarking these practices against competitors an organisation can gain a greater understanding as to which elements of their business support their competitive advantage (Maon et al. 2009).

The interviews concluded that no formal audit of the businesses sustainability practices in 2015, or later, was conducted, however, there were informal benchmarking practices. The first time this happened was on their 2014 sailing trip where the CEO and COO updated their 5-year plan for Bolscher: "Once a year, we go sailing and update our five-year plan. From 2015, the plan focused on sustainability, because until then we hadn't done much about it." (Interview CEO, 14 March 2021). Although they did not assess the current sustainability status, which is also part of this step in Maon et al.'s (2009) framework, they did compare

their ambition to produce PBP with other hospitality suppliers in their region of Twente. This assessment was based on the knowledge they had readily available, instead of a detailed qualitative and quantitative assessments that Maon et al. (2009) speak of. In the comparison they made, they came out favourably. However, compared to other hospitality suppliers in the West of the Netherlands, they were falling behind in terms of sales. This fits with what we saw in the history event analysis, which shows that growth of PBP took off a few years prior. In the east of the country, however, this was much less the case.

Although Bolscher has not explicitly benchmarked their practices against competition, the interviews showed that there was an understanding of their position in the market relative to regional competition when it came to PBP.

> "Here in the region, we have been the first to do so, by which I mean selling meat replacement products. But in the region of Twente, people are unfortunately not so keen on vegetarian products yet. And if you look to the west, you see the growth much more." (Interview Head of Sales, 2 June 2021).

Here awareness is shown regarding their competition, and the fact that Bolscher is ahead of their competitors with regards to PBP products. However, there is also an understanding that competition from the West is further ahead still and their competitive advantage is attributed to their geographical presence, instead of other key difference such as: the quality of the products of competition. When asked about why the Bolscher's PBP's were underperforming in terms of sales, geography was unanimously given as the key reason. This could be a result of a lack of systematic benchmarking relative to their competitors leading to a lack of understanding of their own, as well as their competitors, competitive advantage.

The societal context in which Bolscher finds itself is slightly different than that sketched by the history event analysis. Although the Netherlands is progressing towards a more sustainable strategy involving PBP, according to Bolscher, there is a divide in this progress between the East and West of the Netherlands. At Bolscher they find that there is little demand for their vegetarian products in the market and region in which they operate. According to several Bolscher employees the demand for PBP is very much centred around the West of the country in which the largest metropolitan cities are located. This is an interesting observation as it is contrary to the history event analysis which shows that Overijssel and Gelderland, parts of the East of the Netherlands where for example Wageningen University is located, are in the process of becoming a novel worldwide PBP cluster. This is also the region in which Bolscher is located. It could be that this cluster is more focused on the technology behind the process of making PBP instead of providing the demand needed for Bolscher to sell more PBP products.

4.2.5 Developing a PBP integrated strategy

The fifth step for an incumbent to achieve organisation change, according to Maon et al. (2009), is developing a PBP-integrated strategy. This step initiates the third 'move' stage, in which the changes

deemed necessary have been previously identified and will now actually be implemented. According to Maon et al. (2009) organisation's successfully complete this step if they translate their vision into practical targets.

At Bolscher both interviews with upper management and strategic documents have shown the presence a long-term sustainability strategy, however, this strategy lacks practical, tangible targets. This long-term strategy, created in 2018, features the following targets:

> "1. In 2018 we will start optimising our PBP as well as meat range and start repositioning Bolscher; 2. In 2018, Meat Your Veggies will continue to be developed as independent companies and will be a supplier to Bolscher; 3. In 2019 we will continue the optimisation of our assortment; 4. In 2020 Bolscher will be an exceptional company with high quality products; 5. In 2025 Bolscher is the supplier for top meat for which you specially go to a restaurant." (Strategic Document - Bolscher, 2018).

This was around the same time that we saw increased awareness around PBP in the market as a whole, as we saw in the event history analysis with the acquisition of the Vegetarian Butcher by Unilever.

The strategic documents provided by Bolscher highlight the organisational change they want to undergo, but fail at showing concretely how they will go about doing so. Appendix 4, obtained from a strategic document created in 2018, shows a general overview of the goals of Bolscher. Their strategy for organisational change revolves around three key themes: 'quality', 'alternative products' & 'sustainability'. To achieve the goals relevant to each theme a short-term action plan was created providing direction for Bolscher. However, Appendix 4 lacks concrete steps and actions as to how they are going to achieve their set goal. Although there are some concrete actions for the steps suggested, there are no concrete targets by which one could measure success. This is in accordance with Maon et al. (2009) who find that it is common for organisation's to draw up long and short-term plans which often miss the integration of measurable sustainability practices and targets.

Like the strategic documents, interviews with the Bolscher staff showed little translation of the PBP vision into practical targets. Although the CEO was clear as to the general vision and goals they wanted to achieve (mentioned in step 2), there was no mention of how they would operationalise their goals. The only evident tangible implementation is the creation of a PBP team within Bolscher, which in accordance with Maon et al. (2009) is an important part of operationalising an organisational strategy. At Bolscher this team consisted of 5 people, however, due to the Corona crisis it had to be scaled back to just the CEO. Aside from the CEO, none of the other interviewees mentioned how the PBP vision is turned into tangible targets, suggesting that this was not yet done at Bolscher.

At Bolscher there are several barriers which limit the implementation of their strategy. A key barrier mentioned by the CEO is the difficulty of convincing other managers that a sustainability strategy is the way forward for Bolscher "internally, I often have to sell my vision to my management team because they almost never agree with me." (Interview CEO, 14 March 2021). The CEO finds that this can be a struggle with changing the course of the organisation. Further, the 'tree hugger' image associated with PBP in the region of Overijssel, in the market in which they operate, makes selling such products difficult according to the COO. This regional barrier was mentioned by four of the interviewees who all stated that the market in which they are currently situated is slow to change. This is contrary to what is found in the history event analysis which shows that the area in which Bolscher operates is one of the worlds largest PBP clusters.

Throughout the Maon et al. (2009) framework they emphasize the importance of continual stakeholder management throughout the unfreezing stage organisational change. Contrary to what Maon et al. (2009) suggest, at Bolscher stakeholders are much less involved with the change process due to the familial nature of the business. This lack of stakeholder interaction brings about both advantages and disadvantages for change. As shown in step 2, it is an advantage in that it provides the upper management of an SME the power to quickly identify and push through the changes they deem necessary, because of the relatively limited number of stakeholder interests. Whilst the CEO has successfully initiated change by providing a vision, it is clear that within Bolscher a lack of stakeholders may have led to a lack of clearly operationalised targets.

The drawback of decreased stakeholder involvement is that there are no stakeholder standards or benchmarks that need to be satisfied in order for an organisation to take a new direction. This is because stakeholders often provide a counterweight which leads to organisation's needing to "demonstrate a balanced business perspective" (Maon et al., 2009 P. 71) when implementing a new strategy. And a lack of clarity early in the change process leads to a difficulty to benchmark and measure the success of a transition later in the process (Maon et al., 2009). It clearly showed in the interviews that the COO will always back his brother the CEO, thus providing little counterweight to the direction the CEO chooses. Regardless of the CEO's passion for implementing PBP, increased stakeholder involvement, or at least counterweight from others within the business could, according to Maon et al. (2009), provide the necessary structure and operationalisation to to their PBP strategy.

4.2.6 Implementation of a strategic plan

The sixth step proposed by Maon et al. (2009) for incumbents attempting to undergo organisational change is the implementation of the previously created strategic plan. Maon et al. (2009) find that often upper management does not implement change, instead, middle management does. By providing training and engaging employees, Maon et al. (2009) find that employees are more welcoming and more knowledgeable about the newly suggested plan right from the start. At Bolscher the implementation of the strategic plan is

heavily pushed by the upper management, who are not only involved in the creation, but also in the implementation. Due to the personal management style of both the CEO and COO, both are continuously interacting with employees ensuring they are aware of the proposed changes.

In order to understand this step within Maon et al.'s (2009) it is important to first see the concrete steps taken at Bolscher to implement the previously created strategy. Firstly, Bolscher aimed at reducing their CO_2 footprint and set themselves a target to reduce their CO_2 emissions by 50% by 2020 ("CO_2 Presetatieladder", n.d.). By 2018 strategic documents show that Bolscher had already reduced their CO_2 output by 79% relative to 2015. As a result Bolscher "was the first meat company to be certified on the CO_2 performance ladder." ("CO_2 Presetatieladder", n.d., Web) and to be awarded with a level 3 certificate by Dutch Ministry of Infrastructure and the Environment ("CO_2 Presetatieladder" n.d.). They achieved this CO_2 reduction through 1. Increasing the efficiency of their machinery by using more efficient machines and installing these in a more efficient manner; 2. Using sustainable electricity by both buying solely green electricity and creating solar facilities to generate their own green energy; 3. Using electric vehicles.

Next to CO_2 reduction Bolscher also aimed at introducing products which contain less animal protein. The CEO stated that "the first meat substitutes were ready in 2017" (Interview CEO, 14 March 2021) showing the first step towards achieving this goal. Since 2017 Bolscher has had plant-based products on the market, however, according to the Head of Sales these have not been very successful yet. "We had a jackfruit product, for example, which unfortunately completely flopped here in the region." (Interview Head of Sales, 2 June 2021). Due to the Corona crisis, which has been present since 2020, Bolscher has had a large reduction in their sales, however, this has also given them more time for PBP product development.

> "We have been developing and working a lot on improving our product. In the normal time it is a lot of pressure, but now we have time to optimise vegetarian products and improve where necessary - we have time for that now." (Interview Production Manager, 12 May 2021).

As a result of the experimentation throughout this period, in 2021, Bolscher has launched its first fully PBP into the market; the shitake burger.

Lastly, Bolscher set out to gain control over their supply chain by taking all meat production into their own hands and not relying on outsourced meat. They achieved this goal by implementing a new division within the business called Harry's Farm which is a butcher run by Bolscher. Bolscher now relies solely on Harry's Farm for it's meat as they have "the whole process from farm to table is in their hands. They make sure they use everything and there is no unnecessary waste." (Interview Sales Employee, 17 May 2021). These goals are achieved at Bolscher through involvement of all levels within the business.

At Bolscher middle managers and employees are involved with the implementation of the suggested PBP strategy. This is a result of the 'reward through responsibility' management style in which Bolscher

employees, regardless of their experience, are rewarded with increased responsibility because of their motivation. An example of this is the creation of the product development group.

> "We made that group [product development] specifically to create new vegetarian products. At first, it was only the team leaders who would do that, but of course it's also nice for other employees to get the chance to develop something new. We have enough cooks in our service who know everything about food. So we also give all the younger guys the chance to do something new or change something - a bit of responsibility." (Interview Production Manager, 12 May 2021).

Involving both middle management and employees in the implementation of the new PBP strategy, in accordance with Maon et al. (2009), is crucial for an effective transition towards a new strategy. This is because according to Maon et al. (2009) the middle management and employees within an organisation are the ones who implement the changes deemed necessary by management.

Contrary to what Maon et al. (2009) suggest, within Bolscher both middle managers and upper management are actively involved in the implementation of PBP. This could be because during the interviews it was clear that opinions regarding PBP among employees were polarised. This can be seen in the differing opinions from these employees: "as a meat company and meat seller, it is just crazy to be involved with plant-based proteins as well." (Interview Sales Employee, 17 May 2021). And on the other hand:

> "There are people within the company who do not always directly agree, but if there is a good story behind it, and that story is true, and it is also proven. Then I personally have no reason to disagree with the upper management" (Interview Production Manager, 12 May 2021).

Because of these polarised opinions among middle managers the upper management is extra involved in the implementation of their strategic vision. "Internally, I often have to sell it to my management team because they almost never agree with me. What I do or invent is not a business model... It is just a vision that we believe in." (Interview CEO, 14 March 2021). The COO also goes on to state "last week I made another burger from 40% shiitake with some wheat flour. I took it to one of our clients and received the following response: this is the first vegetarian product that looks a bit like meat" (Interview COO, 13 March 2021), showing the COO's involvement in both the production and sales processes. This, contrary to the findings of Maon et al. (2009), shows that in some cases, when the middle management may be divided, it is important for upper management to stay involved. In the case of Bolscher, the management is so intrinsically motivated to generate change that he wants to control the entire process. As Bolscher is a smaller scale incumbent this is possible.

At Bolscher upper management, middle management and employees are heavily involved with the implementation of the new PBP strategy. This is contrary to what Maon et al. (2009) find; that middle management implements the novel strategy whereas upper management is more responsible for deciding the direction. Mostly likely this is a result of Bolscher's smaller scale. At Bolscher the CEO is part of the

Frontrunners in Energy Overijssel association in which large businesses in the region "help companies act more sustainably." (Interview CEO, 14 March 2021).

Although most companies that are part of this group send 'sustainability teams' to represent their company at Bolscher the CEO himself goes to the meetings:

> "I was there as the only board member. All the other people who come there are part of a team or a project and tell me 'yes, I wish we had a boss who gives us a bag of money to do what we want in the context of sustainability'. And I think that that is very often missing." (Interview CEO, 14 March 2021).

This highlights that at Bolscher the CEO is actively busy with implementing and learning about potential directions of their PBP strategy. Next to this, the other member of the upper management also stated that he was often involved in the trouble shooting process of the production of new PBP products. "Last week I made another burger from 40% shitake with some wheat flour." (COO). This is a result of the informal hierarchy encouraging interaction between all levels of staff "because there is so much communication, everyone partakes in the action." [Interview Head of Sales, 2 June 2021). As a result, the CEO and COO don't just decide the direction, but also support their team with the implementation of their strategy.

Within Bolscher the PBP strategic plan was implemented by the upper management, and they decided it was important to become a stakeholder in the regional PBP community. As a large butcher Bolscher is part of many sector organisation's who represent their interests. The CEO states that:

> "I am in a group the RBA (Royal Dutch Butchers Association). They were always angry about animal protection or the news about the environment however, I often argued it is also true what the media and politicians say. So then you show the group how you stand on this issue. Then you quickly get calls from other people saying they agree with you, one of which was Wageningen. And so we started a project together with them." (Interview CEO, 14 March 2021).

In this case the CEO proactively went against the status quo presented by the RBA and immediately was approached by relevant local stakeholders in the area who appreciated his open mindedness. The history event analysis showed that Wageningen University are part of the Dutch protein cluster, and this cluster is fortified by involving more motivated local businesses such as Bolscher.

4.2.7 Maintaining internal and external communication

The seventh step suggested by Maon et al. (2009) for generating organisational change is maintaining good internal and external communication. This step, unlike others, needs to continually take place throughout the final stages of the organisational change process (stages 'move' and 'refreeze'). This is because communication between all levels of the organisation throughout these steps increases internal awareness regarding the progress of the organisational change processes and shines a light on the aspects which may

or may not be going well. Within Bolscher the familial nature of the business can be both advantageous and disadvantageous for communication.

The internal communication with Bolscher tends to happen informally between colleagues providing many touch points and an ease of communication between various parts of the business. Although some formal communication methods, such as structural meeting between the sales team and management, are present, according to the interviews Bolscher relies a lot more on informal face-to-face contact for its internal communication. This is best summed up by the Head of Sales who stated that:

> "the communication threshold here is very low, it is and remains a family business. We eat at the same table, greet each other in the morning, you have few boundaries preventing you from walking into someone else's office, and I know the guys privately as well. So it has been like this from a very young age." (Interview Head of Sales, 2 June 2021).

This exemplifies the informal nature of a family business in which communication is constant and the barriers to do so very low. This brings the advantage that everyone there is a continuous dialogue between all employees, including the upper management. A disadvantage of this is the lack of formal documentation regarding their PBP or communication strategy. Bolscher was able to only supply one strategic document from 2018 outlining their strategy and for the rest everything was communicated informally in person. Maon et al. (2009) stress the importance of having a detailed communication plan for this step, which, at Bolscher, was not present.

The informal nature of internal communication with Bolscher also brings with it a lack of unified, organisation wide, communication. This, according to Maon et al. (2009), makes the organisational change stages 'move' and 'refreeze' more difficult as it leads to an uneven diffusion of communication and a lack of structure regarding the vision and strategy within the company. "To be honest, I haven't really had extensive communication with me and my team about this. There were two groups that would meet weekly and it was communicated to them, but not really to me." (Interview Sales Employee, 17 May 2021). The informal structures thus allow for continuous reinforcement between involved parties, however, when employees are not directly involved with the sustainability products, they are often also not aware of the overall strategy. Generally the informal communication also results in a lack of concrete structural practices deemed crucial by Maon et al. (2009) for effective organisational change.

Externally Bolscher's communication is present in the forms of media and a website, however, it also lacks a level of coherence. Maon et al. (2009) find that media coverage, progress reports and website communication are important ways for organisation's to communicate the progress they have realised and what they are still aiming to achieve. Externally, Bolscher communicate through various channels, however, their communication varies in intent. This, Maon et al. (2009) acknowledge, is often the case as organisation's have a range of stakeholders to satisfice and leaning too heavily on the new vision can scare

away old, important, business. According to Maon et al. (2009) "Using collateral media, such as newsletters, magazines, or other frequent delivery modes, can be particularly useful" (Maon et al., 2009 P. 82) for sustaining organisational change. Bolscher utilises two out of the three suggested forms of communication by Maon et al. (2009): media (including social media) and website. However, these two forms of communication sketch quite different perceptions of Bolscher. Firstly, the Bolscher media coverage is predominantly about their transition and that they are one of the first in the area to do so. Media titles such as 'Meat company Bolscher goes for vegetarian' (Stichting Klimaatvriendelijk Aanbesteden en Ondernemen, 2019) and 'Meat company Bolscher from Enschede goes on a vegetarian tour' (Kruise, 2019) allude to their transition towards PBP. However, their website only alludes to their transition and sustainability integrated strategy in a minor way with the PBP section hidden away in several menu's. This shows the dichotomy of their external communication with the media singing their praises and their own company website barely acknowledging the change. This could be, in accordance with the logic of Maon et al. (2009), because most of their clients are from the local area (Overijsel) and refer to the website for their produce.

The growing media presence of Bolscher surrounding their PBP products is in line with the historical event analysis. Throughout the end of 2019 media started publishing more articles about the East of the country with global PBP sensations such as Beyond Meat drawing attention to the region. It was also in this period that Bolscher started collaborating with key national PBP knowledge partner Wageningen University. Located in the East of the country it was a logical move for Bolscher to begin collaborating with Wageningen University who are in the same region. Together they created a product 'Meat Jack' which is a jackfruit based PBP. Interestingly, Wageningen University approached Bolscher due to the actions of the CEO. Clearly Bolscher stood out to Wageningen as a progressive meat-producing partner in the region.

4.2.8 Evaluation strategies and communication

The eighth step for incumbents to generate organisational change is the evaluation of any implemented strategies and communication. Within this step Maon et al. (2009) find that effective evaluation is key to creating sustained change towards a new norm. As a result, their frameworks attempts to look at the evaluation practices present within an organisation, the results of these practices and the barriers of growth according to key managers within the organisation. Within Bolscher there are some evaluation practices, however, as with many other steps, these are less concrete than the specified structural practices Maon et al. (2009) deem necessary. This could be attributed to the lack of a clear working definition of sustainability by which Bolscher can benchmark its practices.

Within Bolscher they evaluate the success of their PBP products through the uptake or decline in sales figures. This systemic practice is in accordance with Maon et al. (2009) who encourage measuring, verifying and reporting during this stage. Sales evaluations at Bolscher are conducted on a continual basis

in which the sales team and upper management come together to see which products are or are not selling "You can see how well our products are going by looking at our sales figures; we regularly make an overview together with the management to see which products are running and which are not." (Interview Head of Sales, 2 June 2021). Next to sales figures, Bolscher pulse interest for new PBP products by providing samples of their new products.

> "How we see what works well, rather than just asking everyone, is by testing. There are certain customers for whom we know certain products sell very well. For example, specific customers who focus purely on vegetarians. You provide them with samples and afterwards look at the numbers. Do they want more or less? It's as simple as that. If the customers aimed at vegetarians don't want our vegetarian product, then it becomes impossible to sell to someone who is still product that has unfortunately… That is because it is too expensive, an overpriced vegetarian product is just not going to work." (Interview Head of Sales, 2 June 2021).

As a result, Bolscher changed the pricing of their product in order for it to become more competitive. Contrary to what Maon et al. (2009) suggest, without a clear working definition of sustainability (step 2) Bolscher still managed to evaluate its practices and create effective change according to the interviews.

Next to this, the quality of the PBP is evaluated internally within the production team who regularly come together to discuss improvements. According to one of the Production employee's continuous evaluations of the PBP's is crucial as through the process of trial and error the PBP undergo "constant improvement and development" (Interview Production Manager, 12 May 2021). This evaluation process is regularly done as:

> "Every product we make, including vegetarian products, must comply with a whole set of guidelines. This has to be done right. We have put in place a system ensure that this is done which consists mostly of regular meetings in which the production employees cross check each others products. We then discuss these and see how things could be improved and what went well." (Interview Production Employee, 11 May 2021).

Although evaluation practices were mentioned by some production interviewees, structural evaluation seemed to still be missing. Generally the interviews showed that, in accordance with the informal communication structures seen in step 7, evaluations were present yet informal.

Aside from interviews conducted with members of the sales team, there seemed to be little structural evaluation processes at Bolscher. This could be a result of the informal familial structure which leads to a continuous iterative evaluation process through informal communication, instead, of a more structured process suggested by Maon et al. (2009). Both the CEO and COO are heavily involved with each facet of the business and thus continuously undergo a dialogue with each team as a form of evaluation. This hands-on approach creates less structural evaluation and more of a continuous dialogue between all the involved team members (regardless of hierarchy). A benefit of this is that the upper management is always well

informed. This allows the upper management to evaluate their sustainability strategy continuously instead of structurally as proposed by Maon et al. (2009). Aside from their annual sailing trip neither the CEO nor COO mentioned any other concrete forms of evaluation they have undergone to assess their PBP strategy either between themselves or with other teams / members of staff. A concrete result of their 2015 sailing trip was the creation of their 5-year sustainability plan. However, other than this, there was not concrete mention of what this sailing trip entails or how the evaluation processes will be structured. Although informal communication provides continual feedback loops between members of staff, it realistically also leads to gaps in information flows. This suggests that there are likely elements of the organisational change process which are currently still not being evaluated as it is much more difficult to determine "what works well, why, and how to ensure it will continue" (Maon et al., 2009 P. 83) without clear goals, and a measurement of the successful (or not) achievement of these goals.

Maon et al. (2009) find that evaluation process' are crucial for identifying the barriers an organisation is facing. The only barriers which were mentioned in more than one interview were: the effect of the Corona crisis as a on the sales of PBP and the geographical location of Overijssel not being interested in their PBP products. Because of the Corona crisis, the government completely closed most of the hospitality services in the Netherlands for over a year. Bolscher had to cut its staff from 120 to just 25 people showing the drastic measures necessary to keep the organisation viable. The hospitality market is the key market in which Bolscher operates, and their hybrid PBP product MYV was introduced before the pandemic.

> "In our market, MYV has not been so well received due to Corona. We have not had enough time for MYV to become a good product. And because of Corona, this product has been disqualified - the whole roll-out of the product did not go as we had hoped." (Interview COO, 13 March 2021).

Here the COO places a lot of blame on the Corona crisis, whereas strategic documents show that MYV was already launched in 2017 – three years prior to the Corona crisis. Thus, MYV's lack of success in the market cannot be solely linked to the Corona crisis. It may be that because of their informal communication practices and lack of structural evaluation Bolscher is unable to attribute the lack of success to specific factors. Thus, attributing MYV's lack of success to unforseen circumstances shows that evaluation practices are not up to scratch.

As a result of evaluation Bolscher found that, next to the Corona crisis, the geographical location in which Bolscher operates is a key barrier to organisational change towards PBP. The employees at Bolscher believe that the region in which they are trying to sell their PBP products is "not really ready for it. Among restaurant owners in the western part of the country, sustainability is already a big issue, but here in the east it is not so big yet, I think." (Interview Sales Employee, 17 May 2021). As a result:

> "We have been looking for a new market. In the beginning, the product did not do well and did not run well enough. Now we have made a few adjustments to the structure of the product and

rearranged the production. And what I hear now is that we are moving into a new market." (Interview Production Manager, 12 May 2021).

This is an example of the way Bolscher goes about identifying a barrier and then implementing a solution. Furthermore, it is interesting that the Bolscher employees consider their geographical location an issue as the event history analysis shows that this is a fast-growing global protein cluster.

4.2.9 Internalising strategy

The last stage for creating sustainable organisational change, proposed by Maon et al. (2009), is internalising the newly formed sustainability strategy. This step is part of the last stage within the Maon et al. (2009) framework in which companies 'refreeze' meaning that they institutionalise the changes they have made into the culture and practices of the organisation. Maon et al. (2009) argue that this is only possible if enough resources are dedicated to institutionalising new norms. Next to this they also find that rewards and penalties can act as a powerful indication as to the dedication to implementing a new initiative.

Dedicating enough resources is a key element for institutionalising organisational change. According to the evaluation of sales figures the success of PBP such as MYV is limited. However, the CEO states:

> "The belief in MYV is greater than the monetary value of MYV. We know that if we are going to make this decision based [the sales of PBP] on money, we are going to lose in a discussion with the rest of the management team. But in my heart, I know I have to do it, otherwise nothing will ever change." (Interview CEO, 14 March 2021).

The CEO thus makes clear that as long as he is in charge he is willing to commit resources to PBP initiatives. When asked whether he thinks he has committed enough resources to PBP he stated the following:

> "Our three goals set in 2015 have somewhat all been achieved. We have achieved 92% CO_2 reduction in five years. Look, we are now going in two directions: if we produce meat, it has to be explainable good, honest meat. And we are following the plant-based protein side. We are going in both directions. So it could be that in 15 years we are either an exclusive meat company for rich people, or we are plant-based. And we will follow both directions full throttle. To be honest, I think it is 50/50. We are going to do everything and see what works out best. My goal is to sell fair products, which can certainly be plant-based, but also animal-based, just produced in a different way than what we do now. The problem is also if you don't have someone who really goes for it, it won't work." (Interview CEO, 14 March 2021).

It is clear from this quote that the CEO is aspiring to pursue both the plant-based, as well as animal protein-based direction with 'full throttle'. This suggests that he is willing to continue dedicating resources, however, he also fails to mention how he will go about doing so – as is the case with several of the steps. Throughout all the interviews and provided documents there was little to no explanation as to what the actual resources were that were to be committed to either direction. The website is a good example of how

this dedication of resources does not yet seem to really be in favour of PBP as there is little attention drawn to these products. Next to this, when asked about the PBP team the CEO stated that “Due to Corona, I also had to shrink a lot. So then these things often go right away.” (Interview CEO, 14 March 2021). This, in accordance with the historical event analysis could be a result of the limited funding SMEs received during the Corona crisis from the Dutch Government.

Maon et al. (2009) find that rewards and penalties are a good indicator of an organisation’s commitment to organisational change. At Bolscher, instead of providing solely monetary rewards, they provide their employees with less tangible rewards such as increased responsibility or being admitted to a new team. An example of this is the previously outlined product development team in “which we create and experiment with new plant based products” (Interview Production Employee, 11 May 2021) to be released into market. “All younger boys the chance to do something new or change something - a little responsibility.” (Interview Production Manager, 12 May 2021). This production group “is something I really enjoy doing on the side” (Interview Production Employee, 11 May 2021), and seems to be an incentive to work hard. According to the COO incentives such as the product development team are the key to getting things done effectively, he stated that:

> “If I don't use incentives for my people, nothing happens, everyone needs a reward. By sitting in the canteen and having the right discussion with your employees, for example, you can also reward them by giving them attention, not only financially.” (Interview COO, 13 March 2021).

This ties in with the informal communication present within Bolscher and the perceived benefits this provides to the motivation of employees. From the employee perspective it too was clear that if they were curious and hard working, regardless of age or experience, they would be rewarded with extra responsibility.

Although rewards relating to the PBP vision were clear, penalties relating to PBP were scarce. Throughout the interviews there was little mention of specific penalties which would act as “symbolic indications of this dedication to the initiative.” (Maon et al., P. 83). The CEO was described by some employees as very passionate, but also very black and white. In his own words he stated “I am quite, well, autistic. If am here and we have to go there, I will, and I will succeed.” (Interview CEO, 14 March 2021). Although examples, such as the CEO firing the top salesman for not wanting to drive electric, show a commitment to the general sustainability vision of the company. There is no evidence of penalties directly related to Bolscher’s PBP strategy. If anything, it seems more like something they are experimenting with in case one day it may work or become profitable. His clear penalties relating to the energy transition, and Bolscher’s ability to reach the CO_2 reduction goals show that this was much more at the forefront of Bolscher’s priorities. PBP, on the other does not seem to really have ‘dedication to the initiative’, which Maon et al. (2009) state is an important factor for institutionalising change.

5. Conclusion

The meat industry is one of the largest contributors of GHG emission in the Netherlands and thus needs to transition towards more sustainable alternatives. PBP provide a solution to this sectoral problem as PBP are not dependant on animals for their production and in turn require far less energy to be produced. As a result, incumbent meat producing companies, who previously relied solely on the production of meat, are undergoing organisational change to produce and incorporate more PBP into their assortment. Previous transitions literature, looking at sustainable transitions within incumbent firms, has assumed that incumbents are often large MNCs. Instead, this research is focussed on a currently underexplored, yet important part of the economy: SME incumbents. The smaller scale of SME incumbents, relative to multinational incumbents, leads to differing needs when it comes to transitioning to PBP. For these SMEs it is important to understand which drivers and which barriers may influence the organisational change they are attempting to undergo. Therefore, the following research question was posed: *What barriers and drivers of organisational change does the SME incumbent meat producer, Bolscher More than Meat, face during their transition towards PBP?*

During this research a four-stage organisational change framework, posed by Maon et al. (2009), was applied to Bolscher to answer this research question. Throughout the first stage, 'sensitising', the results showed that a significant contributor to 'raising awareness' (Step 1) of the need for PBP was the inherent smaller scale of the SME incumbent and deep conviction of its leadership. This was in part due to the upper management who were individually driven to introduce PBP and have complete control over the direction of the business. During the sensitising stage it was clear that an individually motivated leadership team in combination with the smaller scale of SMEs accelerates the awareness raising process. The history event analysis showed that this first stage occurred earlier at Bolscher than within the industry as a whole as meat producing SMEs were predominantly focussed on the energy transition and less on the protein transition during this period. Thus, ease of communication due to the smaller scale of SMEs, in combination with individually motivated managers, is a driver for transitioning towards PBP during a time in which this was less common.

Throughout the second stage, 'unfreezing', results showed that a PBP vision within Bolscher was created and communicated, however, the operationalisation of this vision was not concrete. This is reflected in the way in which Bolscher went the creation of their PBP vision (Step 3), and the translation of this vision into practical targets (Step 5) all of which were only partially done and not clearly operationalisable. The history event analysis shows that this stage occurred in a period characterised by the institutionalisation of PBP with companies such as Unilever acquiring the Vegetarian Butcher. According to Maon et al. (2009) the lack of an operationalised vision could be a result of the limited stakeholder involvement in the organisational change process at Bolscher. Throughout the Maon et al. (2009) framework they emphasize the importance of continual stakeholder management. Contrary to what Maon et al. (2009) suggest, at

Bolscher stakeholders were much less involved with the change process due to the familial nature of the business and the resulting small number of stakeholders, as is likely to be the case for most SMEs. Decreased stakeholder involvement can improve the rate at which organisation's change as there are less expectations to manage, however, the drawback of decreased stakeholder involvement is that there are no stakeholder standards or benchmarks that need to be satisfied for an organisation to take a new direction. The identification of necessary changes (Step 2) was thus, a rapid process at Bolscher at little stakeholders needed to be satisficed during this stage. However, Bolscher also showed that, in accordance with Maon et al. (2009), a lack of stakeholders can lead to a lack of structural practices (no clear operationalisation of strategy) normally deemed necessary to satisfy stakeholders in MNCs. It is therefore important for SMEs to be aware of the importance of implementing structural practices as they undergo change, as without these and with little stakeholder involvement, the operationalisation of an SMEs PBP strategy may not be as clearly operationalised as it should be.

Throughout the third stage, 'move', results showed that some progress towards implementing PBP's at Bolscher was made regardless of the lack of structure in the previous stages. During the move stage Maon et al. (2009) stress the need for structural communication and evaluation practices, however, at Bolscher informal communication (Step 7) brought about both advantages and disadvantages not addressed in the framework by Maon et al. (2009). At Bolscher the hierarchy among employees is much less rigid than may be the case in larger MNCs leading to continual informal communication between all employee. This was a clear driver of change. Relative to larger firms, informal communication increases the touch points between upper management, middle management and the rest of the employees on a daily basis allowing for continual change and iterative evaluations (Step 8). As a result, contrary to what Maon et al. (2009) suggest, at Bolscher the upper management was far more involved with the implementation of their vision. The informal communication, and less rigid hierarchies resulting from the SME structure, resulted in an increase in the motivation of younger employees who felt empowered, regardless of their previous experience, to create their own success within the PBP vision of the organisation. Increased informal communication is likely to be the present in all SMEs as their relatively smaller organisational structure makes communication between various levels within the company hierarchy easier.

A key drawback of informal communication throughout the 'move' stage is the lack of structural communication deemed necessary by Maon et al. (2009). Informal communication is inherently more likely to occur within SME incumbents because of their scale. However, this does not exclude the need for SME incumbents to incorporate structural practices into their organisation. A structured approach to both setting goals and communicating, due to the size of MNCs, is inherently necessary for organisation of such scale to operate. At Bolscher, however, this was not the case and the informal communication led to a lack of operationalisation and structure throughout the organisational change process. This concurs with both Maon et al. (2009) and Lozano (2013) who find that structure within an organisation decreases the reliance

on ad-hoc measures and serendipity which act as a barrier for organisational change. This barrier is more exclusively linked to Bolscher than SME incumbents generally as structural communication practices are implementable regardless of scale. It is clear that SMEs deviate from MNCs in their forms of communication, this is likely to be a characteristic for SMEs at large and has an effect on the dynamics of organisational change in a way that is different from MCSs as suggested by Maon et al. (2009).

Throughout the final stage, refreeze, results show that not enough resources were committed to internalising the novel PBP strategy (Step 9). Bolscher, although showing the intention to change, show little evidence of a commitment of resources to their PBP strategy. This is exemplified in their online presence where the focus is on Bolscher's CO_2 reduction and pays little attention to their range of PBP products. Further, in response to the Corona crisis, Bolscher has decided to remove the PBP team responsible for embedding and monitoring the PBP strategy in the business. According to the CEO of Bolscher, the extenuating circumstances (Corona) jeopardised the ability of the organisation to dedicate sufficient resources.

However, the results indicate that prior to the Corona crisis Bolscher was not willing to commit sufficient resources to their PBP strategy. This, in accordance with Maon et al. (2009), is a major barrier for internalising an organisation's PBP strategy. Relative to MNCs, committing resources is significantly more difficult for SME incumbents as they operate with limited access to capital. The history event analysis showed that in the Netherlands, the lack of access to Corona funding for SMEs relative to MNCs was a reported issue and this is reflected in results at Bolscher. Thus, the lack of resource commitment is therefore twofold; firstly, it results from the PBP strategy not being Bolscher's main priority and secondly, it is a result of extenuating circumstances because of the Corona crisis.

Generally, the findings across all four stages show that the smaller scale of SME incumbents acts as both a barrier and a driver when it comes to transitioning towards PBP. When looking at the Maon et al. (2009) framework it becomes apparent that due to a lack of structure in the earlier 'unfreeze' stage the later stages 'move' and 'refreeze' were impacted and became more difficult for Bolscher. This is because the structural practices, which according to organisation change literature (Maon et al., 2009; Lozano, 2013) should be established early on in the organisational change process, are not present. At Bolscher this clearly had implications on the rest of the change process. This lack of structure is why today Bolscher may still be struggling with its PBP strategy, regardless of external factors such as the Corona crisis. MNCs, due to their scale, often need to rely heavily on structural practices because of stakeholder management and clear communication practices (Maon et al. 2009). SME incumbents may not recognise the importance of being proactive in creating structure and clearly operationalised targets when developing and executing their strategy. As observed in Bolscher, the absence of such structures would appear to be a barrier to change.

6. Discussion

This research consisted of two forms of analysis, firstly the history event analysis and secondly the interview analysis according to the organisational change framework developed by Maon et al. (2009). The history event analysis has allowed for a deeper understanding of the context within which events have led to the development and diffusion of PBP throughout the Dutch market, over time. This has provided a more accurate understanding of how events in the environment surrounding the SME incumbent (Bolscher, more than meat) may, or may not, have influenced their organisational change towards PBP. Data was collected at Bolscher through interviews with employees and management, analysis of strategic documents and desk research of their website and online presence.

The framework used by Maon et al. (2009) was originally created to show the route large incumbent firm, such as IKEA, Philips or Unilever, have undergone to implement 'green' organisational change. This thesis has utilised the same stages and steps suggested by Maon et al. (2009) and instead applied these to an incumbent SME active in the meat industry to understand the drivers and barriers they may face when undergoing a transition towards PBP. Throughout the results it becomes clear that SME incumbents derive both barriers and drivers from their smaller organisational structure. These findings contribute to the current body of literature by showing that change processes towards PBP within SME incumbents differ from MNCs. By showing the drivers and barriers which influence SME incumbents this research fosters better understanding of their change processes, how these may deviate from MNCs and thus, how SME incumbents can be better supported.

It is important to mention some side notes to the findings of this research. First of all, the reliability of this research is limited as the body of data used consisted of just one SME. Thus, the conditions under which they acted are specific to their case, location and familial business structure. However, the majority of agrarian SMEs in the Netherlands are familial and thus some findings are relevant for SMEs on the whole. Organisational change findings related to smaller scale of SMEs, such as informal communication structures and limited stakeholder engagement, are likely to affect SMEs at large as scale is inherent to all SME organisation's. This data should be further tested to see if the conclusions drawn regarding organisational change in this research can be upheld against a larger body of data.

Throughout this research an appropriate methodology was utilised, including interviews with PBP involved parties, collection of secondary data and a historical event analysis. Maon et al. (2009) relied purely on interviews and secondary data and thus this research is made more robust through the addition of a historical event analysis. Lastly, by verifying the data within the existing body of literature, checking for alternative explanations throughout and reviewing findings with peers, a form of triangulation (Patton, 1999), this research has aimed to curb subjectivity and researcher bias.

Aside from the limitations of this research there are also several theoretical implications that this thesis has brought about. Firstly, this research has shown that in the previous literature reviewing transitions within a sector, incumbents have, for the most part been significant influencers within their market meaning incumbency was linked with scale. This is evidenced the use of predominantly MNCs as case studies in incumbent transition literature (Maon et al. 2009, Saari et al., 2021, Lee & Hess et al., 2019). However, as is shown in section 2.2 of this paper, incumbency relates more to the position of an organisation within a dominant regime not explicitly scale. As discussed, incumbents of smaller scale, such as SMEs who are a crucial part of the Dutch economy, are underrepresented in the current body of academic data looking at sustainable transition literature within incumbents. As a result of the underrepresentation of SME incumbents there has also been little focus on the way in which incumbents of this scale transition to PBP.

Thus, not only the scale of the incumbents studied, but also the subject matter, is under researched and therefore chosen as a focus point to be researched in this Master Thesis. On the basis of the evidence found in this research, it is possible to conclude that the framework applied Maon et al. (2009) is both informative and appropriate for smaller sized incumbents and may also be appropriate to understand how other SMEs in different sectors are successfully implementing innovation in the Netherlands. This contributes to theoretical knowledge by increasing the understanding of the role SME incumbents play in the transition towards PBP. By providing an insight into the organisational change in SMEs, and that this change differs from MNCs, the theoretical knowledge regarding the change processes within SMEs transitioning towards PBP is furthered.

Not only has this thesis addressed a relevant gap in the current body of knowledge, it also adds to the societal understanding of SME incumbents and the drivers and barriers they face when transitioning towards PBP. Firstly, by increasing the knowledge base on incumbent SMEs looking to transition towards PBP's this research aids policy makers in the Netherlands with understanding where these organisation's struggle in the process of change. As a result of this increased knowledge policy makers can more accurately support businesses such as Bolscher with making a sustainable transition. Barriers presented such as the lack of structural communication practices and stakeholder management could be addressed through training and skills development. By implementing such measures public policy can support SMEs by providing them with information on where their organisation may struggle during their change and provide the skills to overcome these hurdles. Secondly, financial aid for SMEs, namely throughout the Corona crisis, provides a safety net for SMEs struggling to prioritise change processes in such times. Lastly, deeper insights into the drivers and barriers of organisational change are valuable for other SMEs looking to undergo organisational change. By SMEs applying these findings into practical changes this paper aids with showing new ways to create consequential change and improvements. Both of these implications are crucial for speeding up the sustainable transitions necessary in the current global climate crisis. Thus, by understanding the specifics of how SME incumbent meat producers change this research

provides handholds on how to further accelerate the PBP transition and help similar SME incumbents to do so.

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8. Appendix

Appendix 1: Interview guide

Opening:

Hi my name is Oscar Jones and I am looking at how SME meat incumbents are going about their organisational change towards PBP. Thanks you for agreeing to partake in this research. I have a series of questions which will take around 45 to go through, first of all could you please tell me what your function is within Bolscher, how long you have worked here and what your opinion is on PBP?

1 – Raising awareness inside the organization

How is awareness within Bolscher raised about PBP? and / or How was awareness raised about the sustainability implications of meat?

1. Was it driven by economic, social, political or individual drivers?
2. Who raised the awareness? Was the process top-down or bottom-up?
3. Did the changes come from within the organisation or were they a response to outside pressure?

2 – Assessing corporate purpose in societal context

Have you experienced the purpose of your firm change? If so, how?

4. Were key stakeholders relating to PBP identified prior to implementation of the novel product?
5. Were the firms current norms and values discussed? And was there an indication of whether the introduction of PBP would clash with those norms and values?
6. What kind of changes to the firm were deemed necessary to implement PBP?

3 – Establishing a vision and definition of sustainability

How was the vision towards PBP created? Was this vision more general regarding sustainability or specifically about the implementation of PBP?

7. Was a concrete working definition of sustainability created?
8. How was the definition communicated with relevant stakeholders? Did they agree or provide input the definition?

4 – Assessing the current status

Did you assess the current status in order to see what needed to change?

9. Was an audit of the current sustainability practices conducted?
10. Did you benchmark your sustainability practices against your competitors?

5 – Developing a sustainability-integrated strategy

Did you create a strategy with regard to the implementation of PBP?

11. Was the created vision translated into practical targets and performance measures (strategy)?
12. Is there a dedicated team for implementing the PBP strategy

6 – Implementing the strategic plan

If a concrete strategy was created, how did you go about implementing this?

13. To what extent were middle management and the employees involved with the diffusion of the new vision and policies?
14. Did the firm experience any resistance to the new vision?
15. Did you conduct any trainings or release any progress reports?

7 – Maintaining internal and external communication

What steps have you undergone to communicate your strategy?

16. Did you have an internal communication plan?
17. Did you have an external communication plan?

8 – Evaluating strategies and communication

Have you evaluated your sustainability / PBP related strategies?

18. Has the strategy undergone any change as a result of these evaluations?
19. What are the key barriers that come forth from these evaluations?
20. What key drivers have aided the success of the PBP strategies?

9 – Internalising strategies

21. Has the firm committed adequate resources to the strategy in order to ensure its continued survival?
22. Is there a reward / penalty system?

Appendix 2: Informed consent form

INFORMED CONSENT FORM for participation in:

Facilitating sustainable organisational change within the meat industry.

I confirm that:
- I am satisfied with the received information about the research;
- I have been given opportunity to ask questions about the research and that any questions that have been risen have been answered satisfactorily;
- I had the opportunity to think carefully about participating in the study;
- I will give an honest answer to the questions asked.

I agree that:
- the data to be collected will be obtained and stored for scientific purposes;
- the collected, completely anonymous, research data can be shared and re-used by scientists to answer other research questions;
- video and/or audio recordings may also be used for scientific purposes.

I understand that:
- I have the right to withdraw my consent to use the data;
- I have the right to see the research report afterwards.

Name of participant: _____

Signature: _____

Date, place: ___ / ___ / ____, _____

Appendix 3: Interviewee functions and date

Interviewee	Function	Date of interview
1	COO	13 March 2021
2	CEO	14 March 2021
3	Production Employee	11 May 2021
4	Production Manager	12 May 2021
5	Sales Employee	17 May 2021
6	Head of Sales	2 June 2021

Appendix 4: Short-term strategy