

The forces and barriers pushing Dutch restaurants to a change and their effects to be more environmental sustainable.

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Abstract,

The drivers and barriers affecting the adoption and use of sustainable practices in Dutch restaurants are investigated in this study. The restaurant sector is crucial in encouraging environmental responsibility as the demand for sustainable development becomes of importance. However, a number of factors influence how much a restaurant embraces sustainability. In order to gain important insights into the difficulties and possibilities the sector is facing, this research tries to identify and evaluate these drivers and barriers. Data were gathered using a qualitative study technique through interviews with managers, chefs, and employees. The investigation concentrated on a number of variables, such as individual characteristics, monetary considerations, customer demand, and the function of external stakeholders. The study sought to identify the intricate interactions between drivers and impediments in the context of sustainable practices in Dutch restaurants by investigating these characteristics. Even if there may already be studies on sustainability in the restaurant sector, the goal of this study is to explicitly examine the motivations for and constraints placed on Dutch eateries. This study intends to close the knowledge gap about the particular contextual elements impacting sustainable practices in the Dutch restaurant business by conducting interviews and collecting data from numerous interviews with establishments. The study did note several obstacles to the adoption of sustainable methods. Restaurants faced difficulties due to financial restrictions, such as the high cost of environmentally friendly items and the difficulty obtaining financing. Sustainable methods are also hampered by customer readiness, habituated behaviour, and aversion to change. The adoption of sustainable practices has substantial ramifications for the restaurant business. The findings identify certain barriers and motivators that have an impact on sustainability activities, empowering restaurant owners and managers to prioritize programs strategically. The research can also assist in the development of effective laws and regulations that will promote sustainability in the sector. In order to solve the issues mentioned and advance sustainability, cooperation among stakeholders is crucial.

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1. INTRODUCTION

As the effects of human activity on the environment grow more and more obvious, the global world has recently become more aware of the urgent need for environmental sustainability. The global recognitions of the UN Sustainable Development Goals have brought about increased awareness of pressing social and environmental issues on a global scale for the next decade, which necessitates a collective reaction from diverse stakeholders, including corporations (Cantele & Cassia, 2020).

Every industry in the world has turned toward environmental sustainability, and the food industry is no different. The restaurant business has come to attention as a substantial contributor to environmental degradation during this time of global awakening, triggering a growing need for reform. In an article about the restaurant industry's effect on environmental sustainability by Dani, Juyal and Rawal in 2021, it was stated that there are several ways in which the restaurant industry contributes to destroying the environment. An example can be given by the plastic pollution created by the industry. Whether they are perishable or not, most raw foods are sold in plastic packaging, and the bulk of this plastic is not biodegradable (Dani et al., 2021). Another example concerns the water pollution, when cleaning materials are released into the environment, they often contain chemicals that are poisonous to both people and other animals and plants (Dani et al., 2021). Food waste can occur in a variety of ways, as detailed by Zaror (1992) in an article about the environmental effects of the food business. Their structure is a function of the starting materials and the manufacturing process used to create the final product. This shows that waste from food processing is relevant to both aspects and can take the form of a solid, liquid, or even a gas (Zaror, 1992). The Food and Agriculture Organization of the United Nations claims that food systems are a significant source of pollution, accounting for more than a third of all greenhouse gas emissions globally (*Food Systems Account for More Than One Third of Global Greenhouse Gas Emissions*, n.d.). The food waste generated by the restaurant business, which in 2020 wasted 83 035 tonnes of food, is another significant part of pollution (*EU Food Loss and Waste Prevention Hub*, 2020).

The attention will be directed towards this focus due to the continuous expansion of restaurants in the Netherlands. According to the Central Bureau of Statistics of the Netherlands, the hospitality industry in the country has experienced a consistent growth over the past decade (Centraal Bureau voor de Statistiek, 2021). Last year, a total of 72,200 establishments were recorded, reflecting this upward trend (Centraal Bureau voor de Statistiek, 2021). In 2021, the Netherlands had a total of 34,074 restaurants, accounting for nearly half of all hospitality establishments within the country (Centraal Bureau voor de Statistiek, 2021). This indicates that the restaurant business desperately needs sustainability changes since it is growing. Loorbach, Frantzeskaki and Avelino defined transitions to sustainability as "large-scale disruptive changes in societal systems that occur over a prolonged period, existing dynamically stable setups dealing with ongoing sustainability concerns are threatened by these sustainability transitions and they offer chances for faster more extensive, and more radical change" (Loorbach et al., 2017, p. 600).

The objective of this research is to examine the factors that drive or hold back traditional Dutch restaurants in the Netherlands towards adopting more sustainable practices, as well as to classify these factors based on the interviews conducted. Previous research has presented the argument that there exists a correlation between the challenges faced by companies and their level of involvement in the pursuit of sustainable transformation. By examining the forces and barriers that have propelled Dutch restaurants towards embracing environmental sustainability, we can acquire valuable perspectives on the obstacles and possibilities encountered by the restaurant industry as it strives for a future rooted in sustainability. This study intends to add to the continuing conversation about environmental responsibility in the restaurant industry by examining the factors and obstacles that drive their transition towards more sustainable practices. The Field theory will be used during this study. Field theory sheds light on the possibility of various reactions by taking changes in the configuration of field forces (Kump, 2023). In this research, the field theory is crucial since it clarifies the process of transformation. It clearly illustrates the existence of the many factors and obstacles that a certain person or group faces. Lewin emphasizes the constellation of field factors that have an influence on actors, placing them in the spotlight (Kump, 2023). Field theory therefore appears as a powerful tool for analysing the complex interaction of many and oftentimes opposing influences that incumbents experience throughout sustainability transitions, as well as for projecting the effects of these forces on their behaviour (Kump, 2023).

The sustainability transitions can be examined using the multi-level perspective. The multi-level approach claims that processes from three different levels are combined to create transitions, the niche level and the landscape level interact with the most relevant level; the regime level (Geels & Schot, 2007). It has been praised that the multilevel view on sustainability changes considers how various contextual variables combine at various levels (Vandermoere, 2018, p. 3). This theory will provide a clear understanding of how the various levels interact and how the effect of the landscape and niche levels might induce changes in the regime level. By investigating this topic, it can help us understand the potential and problems that the restaurant industry must deal with as it strives for a more sustainable future. From this, the research question that will follow is:

RQ: What are the forces and barriers underlying the sustainability processes in the restaurant industry and what effect do they have on the sustainability practices in the restaurant industry?

Overall, this thesis seeks to add to the body of knowledge by exploring the significance of cooperation between various players and offering insights into the drivers and obstacles particular with a focus to Dutch restaurants, of which not much research can be found. This study can help restaurant owners, managers, politicians, and other industry stakeholders make wise decisions and create powerful strategies for promoting sustainability by filling this research vacuum.

This study begins by doing a thorough analysis of the prior literature, whereby essential ideas are clarified and a summary of the most recent research on sustainable restaurants is given. Within this, the drivers and barriers for embracing sustainability are identified. Subsequently the third chapter elaborates the research approach. Qualitative research methodology is employed, specifically utilizing a case study design and incorporating multiple semi-structured interviews. The findings obtained from the conducted interviews are presented in the fourth chapter. The fifth chapter then provides a critical analysis and examination of these findings, establishing connections between the existing literature and the new insights derived from this research. The sixth chapter provides a concise summary of the research findings.

2. THEORETICAL FRAMEWORK

All of the topics discussed in this study will be supported in this part. First, an introduction to the Multi-Level Perspective will be given in which the three levels will be described; regime, niche and landscape. Next, the Field theory will be elaborated. After this, the drivers and barriers identified from the literature will be explained.

2.1 Theoretical background

2.1.1 Multi-Level Perspective

The Multi-Level Perspective perceives transitions as the results of harmonization between advancements occurring at various levels (Geels & Schot, 2007). A variety of arrangements of elements exist at each level, with higher levels displaying more capabilities in comparison to lower levels in terms of the number of players participating and the degree of alignment between these elements (Geels, 2011). Given that transformations are defined as “shifts from one regime to another regime” (Geels, 2011, p. 26), the focus primarily lies on the regime level.

The regime level is referred to as, “the semi-coherent set of rules that orient and coordinate the activities of the social groups that reproduce the various elements of socio-technical systems” (Geels, 2011, p. 27). Regime rules encompass a range of elements that include ingrained patterns of thinking and shared convictions, ways of life and user behaviours, supportive institutional setups and regulation, aptitudes and proficiencies, as well as contractual obligations that carry legal weight (Geels, 2011).

Emerging concepts are frequently characterized by instability and initial underperformance upon their introduction, and are commonly referred to as technological niches. This is because they often originate at the micro-level (Geels & Schot, 2007). Within the realm of innovation, niches represent safeguarded environments like research and development laboratories or small market segments. These niches are characterized by users who possess distinct demands and demonstrate a willingness to endorse and facilitate the growth of emerging innovations (Geels, 2011). As expectations become more precise and widely embraced, as various learning processes align to establish a stable configuration, and as networks grown in size, niches gain momentum (Geels, 2011, p. 28).

The landscape level sheds light on more than just the technical and material underpinnings that sustain society; it encompasses macroeconomic tendencies, political beliefs, cultural values, and demographic trends as well (Geels, 2011). The development of the innovations is not only influenced by the niche and established players but also by the broader sociotechnical landscape. This external

environment plays a crucial role in determining the direction of innovation (Geels & Schot, 2007). To gain insights into the potential changes within a regime, it is crucial to comprehend the impact of both the niche level and the landscape level. This understanding allows us to recognize the diverse pathways through which a regime can undergo transformation. A previous research has investigated the development and use of the MLP heuristic framework as a way to more clearly understand agri-food systems (Morrissey et al., 2014). It was found that the agri-food regime is also more susceptible in the short- to medium-term to a variety of increasingly common landscape level threats (Morrissey et al., 2014, p. 297). We use the Multi-Level Perspective because it views changes as the result of complex interplay between radical niche innovations, an existing regime, and the wider environment (Verbong & Geels, 2010). The MLP reflects the intricacies and interdependencies inherent in sustainability transitions by looking at interactions between different levels. It offers insightful information for academics, practitioners, and policymakers about the dynamics and complexity of changing to more sustainable practices within the restaurant industry. It can locate the forces and barriers within different levels of the Multi-Level Perspective and shed light on the stability.

2.1.2 Field theory

Kump (2023) elucidated that the application of Field theory offers a valuable framework for comprehending the potential reaction to necessary sustainability transitions. By considering alterations in the arrangement of field forces, Field theory provides insights into how different responses can emerge (Kump, 2023). Lewin conducted a thorough examination of the contextual environment in which individuals navigate and interact with the broader field, as well as how they engage with one another (Burnes & Bargal, 2017). Both internal and external causes can influence (for instance) a business to modify its strategy and bring about the change; sociocultural changes can be viewed as external pressures (Thomas, 1985, p. 55). However, internal pressures might also contribute to transformation. “Environmental changes may have an impact on internal causes of change” (Thomas, 1985, p. 55). The significance of Lewin’s field theory in this study lies in its capacity to provide insights into the mechanisms of change, enhancing our understanding of the change process. It offers a transparent depiction of the varied forces and barriers that a specific individual or group encounters and must navigate. The field theory has been used in previous research concerning the food industry. A model of the dynamics at work in Australian supermarkets that are either preventing or promoting the use of healthier price promotion techniques was made with the use of the force field analysis (Grigsby-Duffy et al., 2022). Some driving forces that were pointed out were the promotion of healthy products, and nutrition education. Some restraining factors concerned the increased costs for customers and the fear of losing competitive advantage from the suppliers’ side (Grigsby-Duffy et al., 2022).

Lewin's Field Theory and the Multi-Level Perspective are related because both theories place an emphasis on comprehending complex social systems and how they develop. The dynamics, interactions, and forces at work inside a system and how they influence transitions or transformations may be examined using frameworks from both viewpoints.

2.2 Related research on field forces

2.2.1 Drivers

In order for restaurants to embark on the journey towards sustainability, they require motivating factors that compel them to make the necessary changes. Different kinds of research on restaurants have identified the following factors that serve as motivators. In a research done by Kasim and Ismail (2012) it was mentioned that there are different cost efficiencies that could be a driver in the direction of adopting sustainable practices. In a previous research by Mohseni, Baghizadeh and Pahl (2022) regarding the barriers and drivers to sustainable food supply chains some possible factors were mentioned. Some most relevant drivers were identified and conclude, using the production of sustainable goods as a strategic advantage, media's role in community education, launching a worldwide business and exporting goods (Mohseni et al., 2022, p. 21). Legislation can also serve as a driving force for change. When faced with stricter environmental laws and regulations, corporate managers feel compelled to meet societal expectations (Stone et al., 2004). This was also mentioned in a research by Gracy and Dodds (2008), they assert that one of the main reasons for requiring environmental certification in hotels is government regulation. Meager, Kumar, Ekren and Paddue (2020) conducted a research about the drivers and barriers concerning the green supply chain management in restaurants in the United Kingdom. They conducted multiple interviews and found multiple drivers and barriers. A driver they found concerned the managerial mind set. This reflects a willingness on the part of management to lessen the restaurant's environmental effect (Meager et al., 2020). This is also seen in a different research. Stone et al (2004) made evident in their research that the role of managers is highly significant in shaping a business's commitment to environmental protection. The environmental pressure was also found in previous research, this concerns the idea that environmental protection should be prioritized (Meager et al., 2020).

2.2.2 Barriers

Although the forces causing change are strong, there are several obstacles that prevent Dutch restaurants from adopting environmental sustainability widely. Potential obstacles can be concerning managers' ignorance and lack of awareness and a lack of confidence in customers (Mohseni et al., 2022, p. 21). Managers' ignorance can also be seen in a different research. Meager, Kumar, Ekren and Paddue mentioned the lack of managerial concern as an important barrier (Meager et al., 2020). From the findings from Kasim and Ismail (2012), it was made clear that restaurant owners expressed concerns about the uncertainty and competitiveness of the restaurant industry, doubting whether their investments would yield the desired outcomes within the expected timeframe. The potential risk of business closure added to their apprehension. According to them, eco-friendly products tend to have higher prices compared to non-green products on average (Kasim & Ismail, 2012). This barrier of cost was also mentioned in a different research in which it mentions that the green practices had to be weighed up against the costs (Meager et al., 2020). In a different research done by Wang, Chen, Lee and Tsai it was mentioned that the limited and sporadic availability of environmentally-friendly resources and lack of customers and community demand hinder the adoption of sustainable practices in the restaurant industry. (Wang et al., 2013, p. 264). The lack of green knowledge and a green

network is also a barrier found in previous literature concerning the barriers that hinder the hospitality industry, especially the hotel industry, to adopt environmental technologies (Chan et al., 2020). Without a network of this kind, hotel managers would find it challenging to educate themselves on the latest environmental issues and to get useful data, case studies, and examples from the sector and appropriate business partners for benchmarking (Chan et al., 2020).

Forces	Barriers
Cost efficiencies	Lack of customer demand
Managerial mind set/role of managers	Manager's ignorance/lack of managerial concern
Leveraging sustainable goods as a competitive advantage	Lack of awareness
Media's role in community education	Lack of confidence in customers
Launching a worldwide business	Higher price of green products (barrier of cost)
Exporting goods	Big of a risk to make huge investment (barrier of cost)
Legislation	Limited availability
Environmental pressure	Lack of green knowledge and green network

Table 1: Overview of the possible forces and barriers founded from earlier empirical findings.

Previous research has shown the many types of pressures that could exist to drive the restaurant sector toward more environmentally friendly practices. In this study, we sought to identify the precise factors that influence traditional Dutch eateries in the Netherlands to adopt greener practices and to determine how to classify them in light of the conducted interviews. The different kind of forces and barriers are known, in this research the constellation of those factors will be made clear. It is not known how the forces and barriers might create different conflicts. Understanding the driving forces behind sustainability processes will enable the restaurant business to identify the root causes of environmental and societal problems and develop practical solutions. This necessitates knowledge of the sociological, political, and economic factors that influence sustainability practices in addition to the natural processes that support them.

3 METHOD

3.1 Type of research

This study employed a qualitative research approach to gain in-depth insights and understanding of the forces and barriers pushing Dutch restaurants towards environmental sustainability. To better understand people's experiences, attitudes, and motives for actions, qualitative research employs a wide range of rigorous study procedures and techniques (Bazen et al., 2021). Qualitative research methods were deemed appropriate as they allow for a detailed exploration of the experiences, perspectives and subjective interpretations of restaurant owners, chef and staff in relation to sustainability practices. This study aimed to capture rich and contextual data, allowing for a comprehensive analysis of the subject under investigation. The study took place over a time horizon of five weeks. In the months May and April. The interviews were all held at the location of the corresponding restaurant.

3.2 Respondents

Purposive sampling is a method used in qualitative research that involves carefully selecting study participants in order to get in-depth opinions from people who have certain traits (Bazen et al., 2021). Recruitment of people with particular qualities who have expertise or experience in a particular area of interest is the goal of purposeful sampling (Bazen et al., 2021). This is what was done in this research to select participants who had first-hand experience and knowledge of sustainability efforts in the Dutch restaurants industry. The sample included restaurant owners, head chefs and staff from a diverse range of restaurants, including fine dining establishments and casual places. Efforts were made to ensure diversity in terms of restaurant size, location, and level of environmental sustainability initiatives to create a broad field. Prior to the interviews, respondents were informed about the purpose of the study through an information letter and an informed consent was made to sign before the interview.

The inclusion criteria that were applied in this study for selecting participants who would be interviewed about sustainability efforts in Dutch restaurants include; the diversity in restaurant types and the size and location of the restaurants. The diversity in restaurants criterion aimed to capture a broad representation of the restaurant industry in the region of Twente and ensure that perspectives from different restaurant contexts were included. This means, both fine-dining establishments as well as casual places participated in this study.

The next criteria concerned the size and location of the restaurant. Participants were selected from various sizes and geographical locations across the region of Twente. This criterion aimed to encompass a range of restaurant settings, considering factors such as urban or rural

locations and different customer bases. It allowed for a more comprehensive understanding of the forces and barriers influencing sustainability practices in different restaurant contexts. This means both small, 30 seats, and large 400 seats, participated in this study, and both restaurants situated in Enschede, Hengelo and Almelo contributed.

Exclusion criteria were also applied in this research. The exclusion criteria ensured that the study focused on participants who can provide relevant and meaningful insights and maintained the integrity of the study. The exclusion criteria were lack of time commitment and limited knowledge or understanding. The first criteria concerned the lack of time commitment, participants who were unable to commit sufficient time for interviews or engagement in the research process may be excluded to ensure the feasibility and quality of data collection. The second criteria involved the limited knowledge or understanding. This criterion ensured that participants can provide meaningful and informed perspectives on the forces and barriers related to environmental sustainability.

There were ten respondents in this study. Different methods were being used to increase the number of participants. At first, an email was sent to the potential participant, in which was elaborated what the study exactly entailed and what was expected from the participant once it agreed to contribute to the study. After this, potential participants who remained silent were sent another email to remind them and ask again if they can make some time to contribute to the study. A personal approach has also been used to increase the number of participants. This meant that individuals who were already known via a personal way were contacted, through this way the personal factor was called upon to create more willingness to contribute.

Resp.	Age	Gender	Role	Geographic location	Restaurant type	Restaurant size
1.	46	Male	Co-owner	Enschede	Bistro	Small
2.	x	Female	Co-owner	Enschede	Fine-dining	Medium
3.	x	Male	Head chef/kitchen manager	Enschede	Brasserie	Big
4.	44	Male	Owner	Enschede	Casual dining	Big
5.	x	Male	Co-owner	Enschede	Small 'living room' restaurant	Small
6.	24	Male	General manager	Hengelo	All you can eat	Big
7.	x	Female	Office manager	Enschede	Casual dining	Medium
8.	42	Male	Owner and chef	Almelo	Fine-dining	Big
9.	x	Male	Owner	Enschede	Village pub	Medium
10	35	Male	Owner	Almelo	Casual dining	Big

Table 2: Main characteristics of the respondent.

3.3 Instruments

The majority of qualitative research uses interviews. Due to their reliance on first-person accounts of experience, they are frequently the method of choice in phenomenological research (Fossey, et al., 2002). Using an interview guide, semi-structured interviews are utilized to enable more in-depth investigation of a particular subject (Fossey, et al., 2002). This method of data collecting has the advantage of assuring linguistic sensitivity and giving participants' knowledge priority (Fossey, et al., 2002). The interview

guide was meant to give a guidance during the interview to ask the most relevant questions. The questions that were asked were open, this created an environment where participants have the freedom to openly express their unique experiences and perspectives. The interview consisted of fifty open questions. The questions were carefully designed to explore and gather insightful information on various aspects related to the forces and barriers. The questions were structured to measure and capture specific dimensions of the research topic. Some aspects that were measured with the interview questions were, awareness and consciousness,

desire for change, barriers and challenges and consumer awareness and demand. In order to assess the participants' degree of understanding and consciousness on the need of environmental preservation, questions were developed. These included investigating their knowledge of the negative implications of traditional practices, such as the energy usage. Other questions in the interview guide aimed to elicit the participants' reasons for wanting to implement sustainable practices in their businesses. These questions aimed to ascertain their intrinsic motivation for adopting environmental sustainability and level of commitment. The questions about the hurdles and barriers were designed to help them recognize the issues they faced, such as financial limitations, a lack of resources, or opposition from stakeholders, and how they dealt with or overcame them. Questions about consumer knowledge and desire for ecologically friendly activities might delve into the participants' perceptions and experiences related to these topics.

3.3 Data analysis

There are three different kind of content analyses. The conventional approach, directed approach and the summative approach (Hsieh & Shannon, 2005). For this study, we used the directed approach. Utilizing pre-existing theory or earlier research to lead the analytical process is part of the directed approach. With this, it aims to strengthen or validate the conceptual framework or theory that is the subject of the study by adding theory (Hsieh & Shannon, 2005). The interviews were recorded during the sessions and afterwards transcribed in order to analyse the data gained from the semi-structured interviews. These have been transcribed verbatim. After this it needed to be coded. There are two methods for coding the data in relation to data analysis: (1) highlighting language that indicates the phenomena of interest and coding it later, and (2) instantly coding the data using prepared codes (Hsieh & Shannon, 2005). The study topic and aims influence the approach chosen. Through further investigation, researchers may even discover subcategories within a category. (Hsieh & Shannon, 2005). Coding is tagging data segments to detect themes. When looking for trends, linkages, or differences between several labels, it helps to find and group together data that has been similarly labelled for analysis as well as to obtain data that is connected to multiple labels (Fossey, et al., 2002). Excel was used to code the interviews based on the transcripts. This was done in several steps. First, the general information about the participant and the interview were written down. The next step included deductive analysis, different categories were identified by prior knowledge. After that, all the categories were listed down and some inductive analysis was done. Different categories that were not selected prior but did come up after analysing the transcript were inserted. With this, a codebook was created which outlines the final set of codes, their definitions and examples. This served as a reference guide for consistent coding across the dataset.

4 RESULTS

4.1 Drivers

As mentioned in the theory section, different kind of drivers will push restaurants towards a sustainability transition. From the interviews, we can make a distinction between the two different kind of drivers, those can be extrinsic and intrinsic.

Intrinsic	Personal <ul style="list-style-type: none"> - Future - Way someone is raised/educated - Awareness
Extrinsic	Financial <ul style="list-style-type: none"> - Energy prices - Saving costs - Subsidy
Extrinsic	Guests <ul style="list-style-type: none"> - Demand of guests - Attracting guests
Extrinsic	Third parties <ul style="list-style-type: none"> - Supplier - Municipality - Competition

Table 3: Drivers pushing towards sustainable practices.

Every head category is divided in multiple different subcategories. The intrinsic drivers are seen in the category of personal motivation with the subcategories, future, way someone is raised/educated and the awareness. The first subcategory concerns the personal motivation to contribute on preserving the environment. This is illustrated by a quote from respondent 8: *"You just become more aware of everything. And you have a responsibility. You have children and you are even more aware. And you want to leave everything as good as possible. And that includes this."* The second subcategory concerns the way someone is raised or educated. This is exemplified by a statement provided by respondent number 4: *"Yes, no more than I already did actually. Just awareness of. I was raised to be against waste, so if you don't waste it you are sustainable. I was raised to be against waste, so I still do that now."* The third subcategory of the personal motivation driver is the awareness. An illustration of this can be seen in the statement shared by the second respondent: *"And also a bit of awareness through reporting and media, yes that certainly plays a role."*

As is pointed out, there are several kinds of intrinsic drivers, but most of the drivers that were identified were extrinsic. From the interviews, there were three extrinsic categories extracted. Those categories are financial, guests and third parties. Every category has a number of subcategories belonging to them.

The first extrinsic driver head category is financial. The belonging subcategories are energy prices, saving costs and providing subsidy. About the financial driver was stated that it pushes them into a different direction towards sustainability. The first subcategory of the financial drivers concerns the energy prices, respondent number eight's statements serves as an example of this: *"Yes, you always look on the internet with energy savings. First of all, this is good for the wallet, but also good for nature."* The second subcategory regards the cost savings. It was mentioned that the chance to save costs is a big driver when it comes to sustainability. To illustrate this point, the statement of respondent number 6, gave a clear demonstration: *"Yes, at least with gas and electricity. We have also tried to save that in recent months. Partly as a motivation for this, of course, is the cost. But it's a bonus for durability. It helps in the end, sure. And then the reason. So that was more and part to be able to save on costs ourselves. Financial motive indeed."* Another aspect of the cost savings regarded the possibility of cheaper purchasing. The

statement from respondent number 3 serves as a great example: *“Yes, I think that in terms of economy and if you are sustainable, that in terms of purchasing technology, you name it, that it is cheaper for you.”* He stated that when purchasing in a sustainable way can save you money. Subsidy was also mentioned and is the third subcategory of the financial drivers. An example of how this was explained by respondent 7: *“If you, such a step budget, if you also have something like this in the hospitality industry, for example, and people are triggered by that so that they get something in return, so that they don't think of it no, I just have to invest, I also get something in return. Then more will follow through with the transition, I think.”* This can incentivize individuals to participate by offering them money to motivate and make it possible for them to make the transition.

The second head category concerning the extrinsic drivers revolves around the guests. This category is divided in two sub-categories; the demand of the guests and attracting the guests. The first subcategory on the subject is the needs of the guests. The statement offered by respondent 2 serves as a fitting representation: *“Well, not the vision, but I think ultimately the demand will influence us, if the demand for sustainable becomes much greater. Look, we already do that ourselves, but if many more people want it, we will also go along.”* From this statement, it was made clear that the demand of the guests can point a restaurant into a certain direction. The second subcategory of the category guests, concerning the extrinsic drivers circles around attracting new guests. The statement of respondent 7 concisely highlights this particular aspect: *“So I think when that is done. Yes, the target audience is getting bigger. Because then people are also more aware that you are much more focused on that. And that you have those things. Then people will also come this way.”* From these two subcategories, we can see that the demand of the guests can lead to more sustainable practices, which in that case can lead to attracting new customers.

The last head category in relation to the extrinsic drivers deals with the third parties that can influence a restaurant. This category has three different subcategories, these are the suppliers, the municipality and the competition. The first subcategory concerns the suppliers, they are an important player because they can have a big influence and help the restaurant industry steer into the right direction. An example was given by the third respondent: *“Yes, the supplier is of course also an important part. But the supplier is automatically always busy with that. If you have the right supplier, he will automatically stimulate you too.”* The municipality, subcategory number two, is also a big actor and can be of significant influence. This is illustrated by a quote from respondent 2: *“Waste is also dictated by, for example, a municipality that wants you to separate it in a certain way.”* This means that a reason for their sustainability practices (waste separation) has been influenced by the way it is forced upon them by the municipality. The third subcategory, the competition, is also of importance to the extrinsic drivers. This point is conveyed by an example given by respondent number 7: *“But if the opponent changes. Yes, and then they see someone else and then they ask, yes, is it possible that it is busy there, that there are people there every time? Is it possible that this is done? Oh, how strange. So that's actually kind of an incentive as well. That's the competition. Seeing that others are doing well. That stimulates.”* When competitors make changes and people observe their success, it raises questions about the possibility of achieving similar outcomes. The

presence of a thriving crowd at these establishments becomes a curiosity and serves as an additional incentive. The element of competition, witnessing others doing well, acts as a stimulant, encouraging further action.

4.2 Barriers

From the interviews ten clear different barriers were identified. Those barriers were categorized in four segments. The head categories are, financial, third parties, guests and habituation.

Head category	Subcategories
Financial	- Big investments - Price of green products - No security for loans
Third parties	- Supplier - Municipality
Guests	- Not ready yet
Habituation	- Lack of responsibility - Old habits

Table 4: Barriers holding back the sustainability transition.

The first head category takes the financial barriers into consideration. The subcategories are big investments, high price of green products and no security for loans. It was made clear from the first subcategory that the investments that need to be done to implement more sustainable practices require a lot of money. The statement from respondent number 4 serves as an example: *“If you want to sustain then you often have to invest a lot of money in one go. Because the adjustment costs a lot of money in one go, which is not always possible.”* The second subcategory concerns the high price of green products since this will have an impact on the price for the customer. An illustration of this can be seen through the statement made by respondent number 6: *“I think the hospitality industry is slowly moving towards it. I think it's difficult for companies to start making those switches, given inflation and things like that. As I said, our purchase price is increasing enormously. If we also had to purchase more expensive, sustainable products, the price would go up. Guests and consumers will notice this.”* An example of the third subcategory was given through the statement of respondent number 4: *“But you don't get that easily in the hospitality industry, not credit at all. The hospitality industry had no security for loans.”* This is an important aspect since a lot of restaurants, especially the small ones, do not have the capital to make those big investments. Without the possibility for a loan, no money can be acquired, which is holding them back to transition towards more sustainable practices.

The second head category is related to the different kinds of third parties that can become a barrier. This category is divided in two segments, the suppliers and the municipality. The first subcategory is related to the suppliers, they were already mentioned in the drivers' section, but they can also become a barrier. This point is effectively illustrated by the statement provided by respondent number 5: *“The continuity of, yes. Certain products are not always... Yes, they have less of that. And they are not always available. That might be a bit more local. Yes, you also depend on what they can offer.”* A restaurant is dependant of what a supplier is able to offer them. This comes down to the continuity of certain products and the availability of green products. The municipality, which is the second subcategory, is also a very important actor. The statement offered by respondent number 2 serves

as a fitting example: *“Yes, I think there is still a lot to be gained there, really from government regulation, at the moment they are not stimulating it enough.”* This indicated that there is still much room for progress in this area, specifically regarding government regulations, as they are currently not providing enough incentive for it.

The third head category consisted of the consumers. This is exemplified through a statement made by respondent 6: *“So it's more like, I can do that now. But I don't expect to get the customers that... I don't think there are enough people doing that right now. That they would specifically choose a concept. Because of the sustainable options we have.”* They do have the capability to do it now, but they don't anticipate attracting customers who specifically seek out such options. They believe there aren't enough people currently prioritizing sustainability as deciding factor when choosing a concept or venue.

The last head category takes the habituation into consideration. This category is divided into the lack of responsibility and the old habits. The first subcategory, lack of responsibility, is especially visible at the small entrepreneurs. This is illustrated by a quote from respondent number 1: *“Yes, it is also the possibility, it is also the government that has to cooperate in this, and that is not, yes, not only the small entrepreneur, it must also be the very big boys, especially, such as Tata steal, I name something, that is of course a thing. The Netherlands can be really annoying and if they don't start to tackle it there, the small entrepreneur will always say yes guys if that doesn't happen why do I have to, that's how it goes.”* The second subcategory, the old habits people tend to have, are also mentioned as barriers. This can create resistance to change. Respondent 7 gave an example of hesitating chefs: *“A lot of chefs always say, I can only cook on gas. I can only cook with gas. I believe that you can cook well on electric. But that it is a way of habituation. Because you can also cook on electric at home.”*

5 DISCUSSION

The research findings shed light on the factors and obstacles that drive the adoption of sustainable practices in the restaurant industry in the Netherlands. Nevertheless, it is important to exercise caution when interpreting these results, considering the limitations. The discussion section critically reflects on the research methodology, highlights the study's constraints, and discusses the implications for understanding and analysing the obtained outcomes. Furthermore, the section concludes by offering a set of recommendations for future research endeavours. The interviews in this research have been used to identify the forces and barriers influencing the sustainability transition within Dutch restaurants.

5.1 Interpretations

The findings of this study, when seen via the Multi-Level Perspective and Field Theory perspectives, offer insightful information on the barriers and forces influencing sustainability transitions in the restaurant business

To get a better understanding of the different forces and barriers identified during the interviews, it is convenient to use the Multi-Level Perspective.

The barriers to habituation, such as a lack of responsibility and ingrained habits, point to how deeply ingrained some business processes are and are visible at the regime level. These routines and a perceived lack of responsibility might engender resistance to change and

obstruct the shift to more sustainable behaviours. The prevalent practices and behaviours in the sector are significantly shaped at the regime level by regulatory pressures. For all restaurants operating under the regime, they establish the minimum standards and expectations. The barrier concerning the lack of guidance from the municipality can be seen here. They preserve the regime at the current level.

The importance of suppliers and rivalry can be perceived at the niche level. Restaurants now have more creative and environmentally responsible menu options thanks to suppliers that offer sustainable goods and services. The suppliers are able to create niches and innovate when exploring and offering different new kinds of sustainable food options. Similar to how companies compete with one another for consumers who are environmentally sensitive, restaurants may embrace sustainable policies to stand out from the crowd.

The larger financial and economic developments have an impact on the financial drivers and barriers highlighted in the results. Variations in market dynamics, global economic trends, and consumer behaviour, among other things, have an impact on the cost of green products, the availability of subsidies, and fluctuations in energy costs. These landscape-level variables have an effect on how restaurants adopt and use sustainable strategies. The findings' reference to guest demand demonstrates how consumer choices and cultural values affect sustainability transitions. Customers are increasingly inclined to seek out eateries that reflect their beliefs and provide sustainable alternatives as public knowledge and concern for sustainability rise. This reflects a larger picture of shifting customer tastes and the elevated status of sustainability in the restaurant sector.

Field Theory emphasizes the social and cultural circumstances in which people function, which offers further insight into the inherent drives. The media's effect on reporting and the transmission of information can be considered as having increased public awareness of environmental concerns. This is consistent with the viewpoint of field theory on the dynamic interaction between contextual surroundings in which people traverse and interact with the larger field as well as how they engage with one another (Burnes & Bargal, 2017). Municipalities, as a component of the larger institutional field, have the power to promote or obstruct sustainability through rules and assistance. Some participants' emphasis on a lack of accountability underscores the importance of Field Theory's emphasis on the impact of outside forces like the government and powerful companies. In the restaurant sector, social dynamics, cultural conventions, and engrained habits may all contribute to people's aversion to change and habituation to outdated techniques.

5.1.1 Drivers

Restaurant owners might have a variety of motivations for being sustainable, it has been shown. Seven drivers stepped forth from the literature. From the interview eleven drivers came through.

Overall, by presenting more in-depth insights from the conducted interviews, the outcomes part builds upon the theory portion. The driver concerning the environmental pressure (Meager et al., 2020), aligns with the findings concerning the subcategory; future. Participants' expressed desire to contribute to the future and the finding that

environmental protection should be prioritized in research confirm that people understand the significance of taking action to address environmental challenges and have a personal stake in building a sustainable future.

Cost-effectiveness is mentioned as an extrinsic motivation of adopting sustainable methods in the empirical research (Kasim & Ismail, 2012), but the results expand this to include financial incentives such as energy savings, cost savings, and subsidies. The results make it clear where the incentives should be when it comes to financially motivating the restaurant industry and builds upon the prior finding about the cost-effectiveness. But also, some new findings came to the surface. The personally motivated driver was partially mentioned in previous research. But it sheds a new light on the personal view of an individual. The intrinsic feeling of wanting to contribute to the preservation of the environment was mentioned lightly in previous research and is an important driver. It shows that people's own behaviour and vision are very relevant and can push them to the sustainability transition, even though they will not gain any (financial) benefits from it.

Suppliers, the municipality, and competitors are listed as third parties that might have an influence on restaurants in the results, but the theory highlights the role of managers, competition, legislation and regulations (municipality) as driving factors (Stone et al., 2004; Mohseni et al., 2022; Meager et al., 2020; Gracy and Dodds, 2008). It can be seen that a lot of third parties mentioned in the theory have also been found in the result, except for the managers' role, which was not highlighted by the respondents. The competitive advantage driver that was found in the results, builds upon the empirical finding concerning leveraging eco-friendly products into a competitive advantage (Mohseni et al., 2022). But the driver from the results is expressed a bit different. The respondent mentioned that restaurants might feel the pressure to go through with the sustainability transitions when the neighbour is attracting customers with his environmental strategy. This motivates the others. But the competitive driver explained in previous research concerns the initial strategy to become more competitive is using more eco-friendly products in the first place. The driver found in the results concerning the guests is also build for a bit upon this finding from Mohseni, Baghizadeh and Paul (2022). The two subcategories in the guest category were the demand of guests and the attracting of guests. The competitive advantage created by using more green products is only competitive because of the attracting of certain guests. This means that the new driver, attracting guests, builds upon the driver found in earlier research and shows what the competitive advantage entails, which is new guests coming to your establishment.

A regulatory function for the municipality is expressly addressed in both the theory and the findings. This indicates its importance. It was mentioned in previous research that corporate managers may feel pressured to conform to society standards as a result of more stringent environmental rules and regulations (Stone et al., 2004; Gracy and Dodds, 2008). The driver concerning the municipality found in the results builds upon this earlier mentioned driver. It was mentioned during an interview by a respondent that the municipality forces them to separate their waste in a certain way and it needs them to show their processes they undertake to become more sustainable. This an example of the environmental rules and regulations mentioned in previous research.

A driver that was not found in previous research concerns the influence of the suppliers on the restaurant industry. The supplier can push them in the right direction when offering green alternatives and showing them the different possibilities of vegetarian, vegan or bio products they have to offer.

5.1.2 Barriers

In keeping with this, the theory part lists considerable investments and the high cost of green products as financial obstacles (Kasim & Ismail, 2012), which is consistent with the results section, where respondents also highlight the necessity for sizeable expenditures and the effects of higher costs on consumers. But the lack of security for loans was not found in previous research. This barrier is in some way linked to the barrier concerning the big investments. When it is not possible for the restaurant industry to get a loan, those big investments will become an even bigger barrier.

Another barrier that is seen in the theory concerns the managers' ignorance and the lack of awareness (Mohseni et al., 2022, Meager et al., 2020). The habituation category from the results build upon this theory. The lack of awareness and the managers' ignorance can cause the lack of responsibility and the clinging to old habits. Lack of knowledge and managerial ignorance may be factors in the organization's lack of responsibility. Managers may not take aggressive measures to incorporate sustainable practices into their everyday operations if they do not see sustainability as a priority or do not understand their role in bringing about good change. This lack of accountability may show itself as a disdain for how actions affect the environment, a failure to take social and ethical issues into account, or a persistence in using conventional, non-sustainable methods. Managers that are unaware of or uninformed about sustainable practices may continue to use tried-and-true traditional techniques that may not be as ethically or environmentally sound. Fearing operational interruptions or potential financial hazards, they may push back against changes that threaten their established routines.

Then, the barrier about lack of customer demand (Wang et al., 2013), which was mentioned during the interviews by a respondent. The lack of customer demand is a cause of the customers not being ready yet. It was stated that there was not enough customer demand which meant that there was no need to make a change towards more sustainable practices. In general, it was stated that the customers are not ready yet to buy green products. A reason could be the higher price or the lack of interest in it at all. Their behaviour and opinion will result in a lack of demand from the customers toward sustainable products.

The same researchers also made a note of the limited availability of green products (Wang et al., 2013). As was also mentioned and pointed out in the results section. This circles back to the suppliers, which can influence them. The barrier surrounding the supplier is linked to the limited availability. Suppliers are essential in deciding whether things are readily available for restaurants. They are in charge of locating and supplying the supplies and commodities that restaurants need to run their businesses.

5.1.3 Force conflicts

Among the data captured from the interviews, some force conflicts might arise. The first conflict can be seen between the financial driver concerning the energy prices and the big investments as the barrier. Higher energy costs may provide restaurants with a financial incentive to implement energy-

saving practices and buy equipment that uses less energy. Restaurants could find it difficult to take advantage of possible cost reductions due to the barrier of large investments needed to execute these improvements. Another force conflict that can be seen concerns the municipality on both the force and barrier side. Regulations, incentives, and infrastructure may all be used by municipalities to support and promote sustainability. Restaurants may be eager to implement sustainable practices, but there may not be a supportive climate if the municipality does not prioritize or actively encourage sustainable efforts. A third force conflict concerns the demand of the guests and on the other side the potential of guests not being ready. It's possible that some customers are becoming more interested in sustainable eating alternatives, such as those that use ethically produced foods and ecologically friendly procedures. Restaurants may be reluctant to engage in green projects if they believe there will be little demand due to customers who aren't entirely ready or prepared to accept sustainable options, which can provide a dilemma. The last conflict is about the awareness and the lack of responsibility. People may be motivated to act and make changes as a result of greater understanding of environmental problems and sustainable practices. However, some managers or employees may lack the accountability necessary to turn their knowledge into real, sustained actions.

5.2 Implications

This research entails various implications for the restaurant industry. It provides a deeper understanding of the specific barriers and drivers that influence the adoption and implementation of sustainable practices in the restaurant industry. The results of this study can guide the strategic decision-making of restaurant owners and managers, empowering them to prioritize initiatives that tackle the identified obstacles and capitalize on the identified motivators to enhance their sustainability endeavours. Another possible implication revolves around the regulations. By focusing on the identified obstacles and utilizing the drivers identified in this research, it is possible to aid in the formulation of impactful policies and regulations that encourage the adoption of sustainable practices in the restaurant industry, fostering a climate of positive change. In a previous research concerning the transition steps needed to transform the food systems, it was made clear that the governments had an important role in the transition and multiple policies were stated to support the transition (Webb et al., 2023). A few examples that were found in the research were; identify and correct policy biases that may seriously hamper transformation or even send food systems in the wrong direction, policymakers must advance the current global development goals and adopt measures to restructure manufacturing systems (Webb et al., 2023). It was made clear that high costs are a significant barrier for restaurants to adopt sustainable practices, policymakers can consider implementing financial incentives or subsidies to offset these expenses.

The identified barriers and drivers can facilitate collaboration within the restaurant industry, as stakeholders can come together to collectively address the challenges. This is also mentioned by the United Nations concerning the 17th Sustainable Development Goal, partnerships for the goals. It acknowledges the importance of multi-stakeholder partnerships in coordinating and transferring information, skills, technology, and financial resources to help accomplish the sustainable development goals (*Multi-*

stakeholder Partnerships | Department of Economic and Social Affairs, n.d.). An important collaboration identified by the study considers the restaurants, municipality, suppliers and consumers. This is of importance because these actors are seen as drivers and barriers, founded from the data from the interviews. This shows how big of an influence they can have on the sustainability transitions once they are aware of the barriers and acknowledge the possibility to push them.

5.3 Limitations and future research

Because the research is based on semi-structured interviews, the findings are subjective and based on the perspectives, opinions and experiences of the participants. This makes it important to acknowledge that different participants may also have different opinions about the subject and have different experiences. This means that their view may not necessarily represent the entire population, thus the restaurant industry in the Netherlands. Another crucial point is the location of where the study took place, in the region of Twente. The generalizability of the results is limited because the study was not performed across the whole country, the results of this study might be less applicable in different places. Which also is a suggesting for future research; the same study performed in a different location. The social desirability bias is also an implication. Because of the sensitive topic of the study, sustainability, participants might feel pressured to provide socially desirable responses. They may provide answers of which they think are in alignment with the societal expectations since the pressure of sustainability is growing. A different suggestion for future research is executing a long-term research to track the changes in sustainability practices over time in the restaurant industry. This would offer valuable understandings regarding the trends, patterns, and enduring impacts of various forces and barriers identified on sustainability practices. The dynamics and efficacy of collaboration among the many stakeholders described in this research, such as restaurants, suppliers, municipalities, and customers, in promoting sustainability in the foodservice business, might be the subject of future research. This could include researching effective collaborative projects and identifying crucial elements that support efficient collaboration and group action.

6 CONCLUSION

In conclusion, successful transitions in the restaurant sector need a thorough strategy that takes into account the multiple drivers and barriers as well as the potential of various stakeholders at various levels of influence. Restaurants can help create a future where people are more ecologically and socially conscious while also growing their own businesses and attracting ethical customers by implementing sustainable practices.

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8 APPENDICES

Appendix A – Information letter and informed consent

This research is led by Bo Jordaan

Purpose of the investigation

The aim of my research is to find out why restaurants in the food industry in the Netherlands do or do not participate in the sustainability transition. The aim of this interview is to find out which 'forces' are at play in the field. These forces can hold back or push change. Employees in the restaurant industry will be interviewed to gain more insight. These data are used for the graduation assignment in the form of qualitative research.

Method

You are participating in a study where we will gather information by interviewing you and your answers to take via an audio recording. A transcript of the interview will also be prepared. The collected research data will be shared with the University of Twente exclusively for the purpose of the research.

Potential risks and inconveniences

There are no physical, legal or economic risks associated with your participation in this study. You don't have to answer questions you don't want to answer. Your participation is voluntary and you can stop your participation at any time.

Compensation

You will not receive any compensation for participating in this study.

Confidentiality of data

We do everything to protect your privacy as best as possible. No confidential information or personal data of or about you will be disclosed in any way that would allow anyone to recognize you.

Before our research data is released, your data will be so much possibly anonymised, unless you have explicitly given permission in our consent form for your name to be mentioned, for example with a quote. Anonymous data or pseudonyms will be used in a publication. The audio recordings, forms and other documents created or collected as part of this study will be stored, but will be deleted after the study has been completed.

Voluntariness

Participation in this research is entirely voluntary. As a participant, you can stop participating in the research at any time, or refuse to allow your data to be used for the research, without giving reasons. Stopping participation will not have any adverse consequences for you. If you decide to stop cooperating during the investigation, the data you already have provided until the moment of withdrawal of consent can be used in the research.

Do you want to stop the research, or do you have questions and/or complaints? Please contact the research leader.

Contact details

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I acknowledge the following, by signing this consent form:

1. I have been sufficiently informed about the research. I have read the information sheet and any questions have been answered.
2. I am doing this research voluntarily. I am under no compulsion to participate in this study. It is clear to me that I can withdraw my participation at any time. I am aware that I don't have to answer every question if I don't want to.

In addition to the above it is possible to give specific permission for different parts of the research. You can give permission or not for each part. If you want to give permission for everything, you can do so in the last square.

3. I give permission to process the data collected from me during the research as included in the attached information sheet.	YES	NO
4. I give permission to use my answers for quotes in the publication of the research.		

5. I give permission during the interview audio recordings and work out my answers in a transcript.		
I consent to everything described above.		

Name of Participant:

Name of Researcher:

Signature:

Signature:

Date:

Date:

Appendix B - Interview guide

Section 1: General questions about person/company

- Could you tell something about who you are and what your job is?
- What is your educational background? => be sensitive here
- (If they are working at a company: What is your position within the company?)
- How long have you been in that company? What did you do before you were in that role?
- In total, how long have you been in the food (restaurant) industry?
- Could you tell something about the company?
 - When was it founded?
 - What is the history of the company (briefly)?
 - Who are the customers, etc.?
 - How many employees does the company have today, what are the main types of employees?

Section 2: Questions about personal motivations about sustainability

- What is your personal attitude towards sustainability? What does that mean to you? How does it affect your own life?
- Has your personal attitude towards sustainability changed over the years? If so, why, and how has it changed?
- How does your own view of sustainability relate to the company's policy on sustainability? (Are there discrepancies or contradictions?)
- Do you feel a personal responsibility to promote sustainability in your job role?

Section 3: General trends of sustainability in the industry

- Are you following general developments on sustainable changes in the food industry, such as the European Green Deal or Farm to Fork Strategy, etc.? And what do these mean to your business?
- Are you aware of any sustainability certifications or standards for restaurants in the food industry? If yes, which ones? And how do these relate to your business?
- Are there any other kinds of changes (e.g., regulations) that currently affect sustainability in the food industry?

Section 4: Relevant forces at play within sustainability transitions

- How important is sustainability for your business?
- You have already made changes towards sustainability. Can you describe them?
- What was the trigger for these changes? How did the ideas come about? Who brought that idea in?
- What was the role of employees in these changes? (if they have employees)

- Have you noticed any trends in consumer behaviour that suggested a growing interest in sustainable products?
- Were there any contradictions/votes against it inside the organization? By whom? What were the arguments/reasons?
- Were there other "forces" against the changes? What pressure was felt here? For example, from the side of the supervisory board, customers, NGOs... (adapt depending on type of the company)
- Have you received any negative or positive feedback from customers, stakeholders, or other industry players regarding your sustainability practices?
- Have you experienced any significant benefits from implementing more sustainable practices?
- What prevents customers potentially from buying more sustainable products?
- If yes, what was the feedback you got from customers and how did you respond to it? How did you deal with it?
- What motivated/encouraged you to implement the changes despite this backlash?
- In implementing the change: what were the biggest challenges? How did you deal with them and what motivated you to continue?
- When did you feel that the change had been successfully implemented and embedded in the company?
- Conversely, who is involved when a restaurant wants to become more sustainable?
- How do they affect your decisions and business operations?
- Are there any further forces that affect changes toward more sustainability in your business?

Section 5: General forces in the field

- Who are the key players when it comes to becoming 'more sustainable' as a whole? I am thinking, for example, of interest groups, training institutes...
- What are the drivers that make the entire restaurants industry more sustainable?
- What are the barriers that stand in the way of making the entire restaurant industry more sustainable?
- How can collaboration between different stakeholders in the food industry (e.g., suppliers, consumers) help to overcome forces working against sustainability?
- What would be needed to make a larger number of companies more sustainable?
- Are there any economic or financial factors that make it difficult for companies to become more sustainable? If yes, please describe.
- What initiatives/funding would be useful?
- Is there currently enough supply of green products and how could this supply be increased?
- If you were a politician, what would you change?

Section 6: Force conflicts

- You have told me about many driving and opposing forces for sustainable change in the food industry. Where do you see the biggest conflicts among those forces? (dig deeper into the information they give).
- What are the effects of these conflicts?
- Did the conflict affect your behaviour or decision-making process? If yes, how?
- How can these conflicts be reduced?

Section 6: Questions to end with

- How could you become even more sustainable? And what do you need for that and what is holding you back at the moment?
- Do you know some others from the restaurants industry that a) are currently considering changing, b) are in the middle of it, d) have successfully changed?
- Did I forget to ask something, or do you want to add something?

Appendix C – Coding scheme

Category	Sub-category	Definition	Number of question in questionnaire	Anchoring example
1. Personal (F)	1.1 Future (d)	The realisation that the environment will be destroyed if we move forward this way.	2.1, 2.3	IP2 indicated that they did not find any big benefits from their sustainability factors but told that they want to make a small contribution where possible.
	1.2 Way someone is raised/educated (d)	The way IP is raised or educated in an environmentally responsible manner.	1.2, 2.1, 2.3	IP4 stated that he was raised to be against waste. IP 2 stated that their chefs were educated to cook in a way that does not produce waste.
	1.3 Awareness (d)	How does the media etc. make IP more aware of the situation of the moment regarding the environmental issues.	2.1, 2.2, 3.1, 3.2, 4.3	IP3 was made aware of the responsibility they have through the media, IP2 also stated that the awareness create by through the media was a reason to become more sustainable
2. Financial (F)	2.1 Energy prices (d)	Recently the energy prices are high, by lowering these costs and thus using less electricity/gas an enterprise will automatically be more sustainable.	3.3, 4.2, 4.3, 4.9	IP5 stated that besides his own personal motivation the energy prices forced him into more sustainable practices.
	2.2 Saving costs (d)	A lot of cost savings will result in consequently lead to more sustainability practices.	4.2, 4.3, 4.9	IP1 mentioned that separating waste, changing lamps to LED lights, turning the heat off sooner will result are certain aspects that result in being more sustainable.
3. Guests (F)	3.1 Demand of guests (d)	The guests might prefer more specific sustainable (vegetarian) foods.	3.3, 4.5, 4.7	IP6 mentioned in the interview that there is an increasing demand in more vegetarian food which forces them to look into alternatives to keep favouring to their preferences.
	3.2 Attracting guests (d)	Guests can have a certain opinion about restaurants that are more sustainable which can attract customers.	3.3, 4.8, 4.10	IP7 mentioned that you can expand your target audience by becoming more sustainable. This might attract new customers who value that.

4. Third parties (F)	4.1 Supplier (F) (d)	If the products a wholesaler sell to the restaurants are more sustainable, the restaurants will be forced in that direction.	3.3, 5.1	IP1 pointed out that the wholesalers are moving towards more sustainable products which means that they have to come along eventually.
	4.2 Municipality (F) (d)	The municipality can enforce the sustainability transitions on restaurants with for example regulations.	3.2, 3.3, 4.17, 5.1 5.7	IP9 mentioned that they have to show once in a while what they are doing, via this way the transition is imposed on them.
	4.3 Competition (d)	The competition can stimulate the sustainability transition, when the neighbour is attracting customers with his environmental strategy, it motivates the others.	4.3, 4.17	IP7 mentioned that it can become a trigger when you see a lot of customers at your competition, to make the change after all.
5. Financial (B)	5.1 Big investments (d)	A lot of sustainable practices ask for a big investment to realize the plan.	4.7, 5.3, 5.6, 7.1	IP3 mentioned that it is hard to know when you will earn your investment back. IP1 even stated that it is not at all possible to make these huge investments.
	5.2 Price of green products (d)	The prices of bio products are higher than 'normal' products. Which will result in higher prices for restaurants and eventually customers.	4.8, 4.10, 5.3, 5.6, 5.8	IP6 has pointed out that the purchasing of sustainable products will lead to more costs for the restaurant which they have to calculate into the price they ask the customer.
	5.3 No security for loans (i)	Business owners in the hospitality industry have no security for loans at the bank. This means that they cannot loan money to invest in big huge sustainable projects. This holds them back.	X	IP4 mentioned that as a restaurant you cannot get a loan, this makes it hard to be able to make big investments.
6. Third parties (B)	6.1 Supplier (B) (d)	As a restaurant, you depend on what a wholesaler has to offer regarding the possibility to be more sustainable.	4.15, 5.1, 5.8	IP5 mentioned that certain restaurants depend on what wholesalers have to offer, if that is not sustainable they will stick to the not sustainable food
	6.2 Municipality (B) (i)	The municipality listens to the government, at the moment they are not being stimulated enough to push it through and control the businesses. Or give out incentives.		IP10 mentioned that there is not stimulation at the moment from the municipality. This includes regulations.

7. Guests (B)	7.1 Not ready (d)	Consumers might not be willing or wanting to buy sustainable products because they do not care for it, are not interested, or don't want to pay for it.	4.5, 4.8, 4.10, 4.11, 5.3	IP4 pointed out that there is not enough demand from the customers to offer a lot of expensive sustainable products.
8. Habituation (B)	8.1 Lack of responsibility (d)	Small entrepreneurs might not have the feeling that it is their responsibility to make the change, it has to come from the bigger players.	2.4, 4.1,	IP8 mentioned that the issue first need to be handled at the big companies, as long as they are not changing, they do not feel the need as a small entrepreneur.
	8.2 Old habits (i)	Entrepreneurs might be embedded in their way of doing things and keep the old habits alive which makes them resistant to change.		IP1 stated that some chefs are hesitant towards the transition and believe it will not go that fast and thus stay with their old habits.